CONSUMER DISSATISFACTION WITH
THE NEW CAR PURCHASE:
ANALYSIS AND PRESCRIPTIONS

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Stephen J. Arnold, Ph.D.

EXECUTIVE SUMMARY

This study was concerned with consumer dissatisfaction with the new car purchase. The objectives were:

. To perform a comprehensive analysis of consumer behaviour with respect to new car purchases, and

. To develop policy implications.

These objectives were achieved by:

. A review of the relevant literature,

. A selective survey of professionals active in the automobile industry, and

. A reanalysis of the CSD data base (the results of a Spring, 1979 survey of 3,000 Canadian households about satisfaction, dissatisfaction and complaining behaviour (CSD) regarding 225 products and services, including new cars).

The research revealed numerous reasons for new car purchase dissatisfaction. Today's new car purchaser selects their vehicle by comparing the alternatives on price, fuel economy, quality, reliability, and servicing requirements. New cars, especially those of the North American manufacturers, failed on some of the most important of these attributes, including quality of materials and workmanship, warranty performance, and dealer servicing.

The reasons for these failings were traced to:

. A lack of emphasis upon the quality of worklife in the plants,

. An inability to quickly adopt advances in manufacturing

technology,

. A reluctance to accept manufacturing goals of error-free operations and perfect products,

. A lack of a societal emphasis upon pride and professionalism in the skilled trades and occupations,

. The manufacturer-dealer relationship which encouraged dealers to prefer the more profitable and easily-managed retail work over warranty work,

. Disagreement between manufacturers, dealers and purchasers over the interpretation of warranty clauses,

. The complexity of today's new car product,

. Insufficient dealer diagnostic capabilities,

. Lack of new car owner adherence to maintenance schedules,

. Lack of service personnel training in human relations skills as well as current automotive technology,

. A dealer emphasis upon sales as opposed to service,

. An inability to account for the intangible aspects of customer satisfaction,

. The large size and bureaucratic nature of automobile manufacturer organizations which made upward communications difficult and responses slow,

. A sales, financial and production orientation with a goal of shareholder satisfaction which predominated over a marketing orientation with a goal of consumer and purchaser satisfaction,

. The complexity of the automobile industry which made it liable to breakdowns in manufacturer, dealer and customer communications, and

. The publication of gas mileage ratings by the public sector resulting in unrealistic new car purchaser expectations.

The research also revealed that the automobile industry generated a relatively higher level of complaints because:

. Consumers are highly involved in the new car purchase and cannot ignore even minor problems, and

. The new car purchaser is distinguishable from the general population and shares demographic and socio-economic similarities with the complainer i.e. the small portion of dissatisfied consumers who contact private and public sector organizations.

Numerous prescriptions for responding to new car purchase dissatisfaction by the dealer were listed with respect to salesforce activities and servicing. The principles underlying these prescriptions were that the dealer:

. Adopt a marketing as opposed to a sales orientation,

. Adopt a long-term versus short-term perspective,

. Ensure open communications in the dealership between the customer and service technician, and

. Appreciate the problems inherent in the servicing area.

Various prescriptions for responding to new car purchase dissatisfaction by the manufacturer were listed with respect to servicing, quality control in manufacturing, quality of worklife, consumer affairs units, marketing research, internal communications, and warranty support. The principles underlying these prescriptions were that the manufacturer:

. Adopt a marketing orientation as opposed to sales and production orientations,

. Improve internal and external communications,

. Account for the intangible nature of long-term consumer satisfaction, and

. Recognize and account for major problem areas related to quality of product and workmanship, servicing, and warranty performance.

Several prescriptions for responding to new car purchase dissatisfaction by the public sector were listed with respect to government-industry cooperation and consultation, improvement in the quality of worklife, assistance to the industry in adoption of current manufacturing technology, usage of marketing research, and advocacy actions. The principles underlying these prescriptions related to:

. Facilitation of industry attempts to increase consumer satisfaction,

. Monitoring industry results in increasing consumer satisfaction,

. Assuming an advocacy role when industry attempts and results were not satisfactory.

Chapter 1

INTRODUCTION AND OVERVIEW

Chapter 1

INTRODUCTION AND OVERVIEW

1.1 Introduction

To determine the scope and importance of consumer problems, the Consumer Research and Evaluation Branch of Consumer and Corporate Affairs Canada commissioned a series of studies on consumer satisfaction and dissatisfaction (CSD). The first study in this series was by Dr. Stephen B. Ash, University of Western Ontario, who provided results concerning a wide range of products and services over a number of purchase dimensions.[1] Respondents from over 3,000 Canadian households were interviewed in Spring, 1979, and asked questions about their satisfaction or dissatisfaction with 225 categories of products and services. The categories were basically classified as food and clothing, durable products and services.

The remaining studies in the series were commissioned as a result of Dr. Ash's study, other sources of information and Departmental priorities. The studies were designed to focus upon the new car purchase, automobile repairs, house purchase, home repairs, and appliance purchase.

One result in Dr. Ash's study was that 21.8% of those who purchased a new car in the previous three years were either "Somewhat" or "Very Dissatisfied".[2] This proportion ranked second highest among 13 categories of cars and other transportation items, second highest among 72 durable products, and fourteenth highest among all products and services in the survey. Dr. Ash concluded his study by categorizing the new car purchase as being among "the most serious consumer problems".[3]

1.2 Research Objectives

This research report is concerned with consumer dissatisfaction with the new car purchase. The objectives of the study were:

. To perform a comprehensive analysis of consumer behaviour with respect to new car purchases involving:

. A review of the relevant literature and a description of the industrial structure and institutional framework;

. An extensive analysis of the existing CSD data base;

. A selective survey of professionals active in the industry; and,

. To prepare a summary research report concisely delineating the analysis and developing policy implications.

1.3 Methodology

In order to attain the research objectives, the following research was conducted:

Literature Review. Over 250 articles and monographs were identified and reviewed. This literature dealt with the following topics:[4]

- The new car purchase process,
- Consumer satisfaction/dissatisfaction with the new car purchase,
- Consumer satisfaction/dissatisfaction and complaining behaviour,
- The automobile industry,
- Automobile industry responses to new car dissatisfaction, and
- Consumer redress and protection mechanisms.

Survey of Industry Professionals. Over 40 letters of inquiry were addressed to:

- The automobile manufacturers,
- Automobile importers,
- Automobile industry associations,
- Automobile owner associations,
- Consumer associations,
- Better Business Bureaus,
- Provincial consumer protection offices and departments, and
- Marketing and consumer behaviour researchers,

Further to these inquiries, personal interviews were conducted with representatives of the:

- Motor Vehicle Manufacturers' Association,
- Federation of Automobile Dealer Associations of Canada,

- General Motors of Canada Ltd.,
- Ford Motor Company of Canada, Limited,
- Consumer and Corporate Affairs Canada, and
- Ten automobile dealers throughout Ontario and Quebec.

Analysis of the CSD Data Base. Further to the results of Dr. Ash's original study, additional analyses were made of the CSD data base. These analyses concerned:[5]

- The profile of the new car purchaser,
- The importance of the new car purchase,
- Satisfaction/dissatisfaction with the new car purchase,

and

- Complaining behaviour of dissatisfied new car purchasers.

1.4 Limitations

The methodology described above is known as exploratory research and is subject therefore to all of the limitations of this form of research.[6] For example, the literature review is subject to lack of timeliness and the fact that the studies and papers reviewed were conducted or prepared for other purposes. In recognition of this limitation, every attempt was made to have several supporting independent studies to support the conclusions or observations made herein.

While letters of inquiry were sent to an exhaustive list of industry professionals, the personal interviews were conducted on a selective basis. While the observations and conclusions subsequently drawn were consistent with at least a portion of these professionals, they are subject to certain biases, such as a regional bias.

Third, the CSD data base was generated to study a broad cross-section of products and services. As such, it is limited in its ability to generate information about only one of the 225 products and services in the total study. In particular, the sample size of dissatisfied new car purchasers was relatively small and estimates of population proportions are therefore subject to a high degree of sampling error and relatively large confidence intervals.

Finally, the automobile industry is large and complex. A complete understanding of this industry could not be achieved in a lifetime of research.

1.5 Overview of the Research Report

Chapter 2 is based upon a review of the car purchase literature. Numerous studies have been made of the automobile purchase process and these studies were reviewed for any insights they provide into explaining new car purchase satisfaction and dissatisfaction.

The objective of Chapter 3 is to focus upon studies dealing specifically with consumer satisfaction, dissatisfaction and complaining behaviour (CSD), and particularly those related to the new car purchase. These studies in total generated perspectives into new car CSD, both relative to other products and services, as well as specific to the new car purchase.

Having identified reasons and rationale for new car purchase dissatisfaction, Chapter 4 then attempts to identify the reasons. Features of the automobile industry which appeared dysfunctional to the new car purchase are discussed in detail.

The final Chapter prescribes numerous responses to new car purchase dissatisfaction. In that many consumer problems originated with actions (or lack of action) by manufacturers and dealers, the majority of prescriptions are directed to members of these groups. Public sector prescriptions are also provided, but mainly directed at facilitating and assisting, and monitoring the automobile industry in solving its own problems.

Footnotes

[1] Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Directions for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer and Corporate Affairs Canada, May 1980).

[2] Ibid., p. 38.

[3] Ibid., p. 20.

[4] The content of the majority of articles and monographs reviewed was subsequently summarized in four annotated bibliographies labelled "Automobile Purchasing Behaviour", "Consumer Satisfaction/Dissatisfaction", "The Canadian Automobile Industry", and "Responses to Consumer Dissatisfaction with the New Automobile Purchase", all dated March, 1982. Copies are available from the author of this research report.

[5] See Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (School of Business, Queen's University, Kingston, Ontario, February, 1982).

[6] For a discussion of the strengths and limitations of exploratory research, and especially usage of secondary data sources, see Gilbert A. Churchill, Jr., Marketing Research: Methodological Foundations, Second Edition (Hinsdale, Illinois: The Dryden Press, 1979), pp. 48-53 and 128-131.

Chapter 2

THE NEW AUTOMOBILE PURCHASE PROCESS

Chapter 2

THE NEW AUTOMOBILE PURCHASE PROCESS

2.1 Introduction

In this Chapter, a perspective is established from which consumer satisfaction/dissatisfaction can be viewed. It is based upon a literature review, the purpose of which was to identify elements of the purchase process which might explain consumer satisfaction and dissatisfaction.

As a result of this review, it was concluded that the following topics have relevance for understanding consumer satisfaction and dissatisfaction:

- Characteristics of the new car purchaser,
- New car attributes,
- Product involvement and self image, and
- Post-purchase loyalty and switching behaviour.

Each topic will be discussed in turn.

2.2 Characteristics of the New Car Purchaser

At least three studies revealed that the new car purchaser can be differentiated from the general population. In the U.K., 1971 and 1972 household samples revealed that the new car purchaser has a higher socio-economic status, greater self-confidence, and higher new car purchase expectations.[1]

In Canada, the reanalysis of the 1979 Ash/CSD data base showed that purchasers of a new car, compared to the total sample, tended to:

1. Be married but less likely to be separated, widowed or divorced,
2. Own their home and be less likely to rent,
3. Have higher household incomes,
4. Be employed full or part-time outside of the home,
5. Participate more in activities such as tennis or skiing,
6. Attend plays more often,
7. Belong more to business or job related groups, and
8. Have read consumer or news magazines in the past three months.[2]

Purchasers of a new car, however, could not be further distinguished from the total sample in terms of community size, sex, age, household size, number of children in household, or educational level.

The third study was conducted in the U.S. and showed that the proportion of households which bought a new car and also already owned two or more cars increased from 2 out of 3 households in 1976 to 3 out of 4 households in 1980.[3]

In total, these studies show that the new car purchaser is affluent, involved, and self-confident. As will be found in the next chapter, however, these characteristics are also those of the complainers, or those dissatisfied purchasers who complain to dealers, manufacturers, or consumer protection agencies. This similarity suggests that complaining behaviour among new car purchasers, relative to products and services where the purchaser cannot be similarly distinguished, will be overstated. In other words, new car purchasers also tend more to be complainers and complaint statistics of cars vs. other products must be adjusted downwards accordingly.

2.3 New Car Attributes

In understanding consumer dissatisfaction with the new car purchase, it was found useful to identify those automobile attributes or characteristics which consumers use in selecting their new car from the various alternatives within a size class. It was hypothesized that dissatisfaction will occur if a new car fails to meet its purchaser's expectations on these attributes. Furthermore, the degree of dissatisfaction will be proportionate to the degree of importance attached to the attribute.

This section surveys a number of studies to identify the attributes consumers consider in purchasing a new car, as well as identify those attributes which are most important. The relative importance of different attributes to different market segments is also discussed.

2.3.1 Fuel Economy

Fuel economy ranked as an important purchase attribute. As indicated in Table 2.1, this attribute was included in most of the reviewed studies and generally was significant or of high rank. In addition, automobile industry executives felt it was one of the consumer's greatest concerns when buying a new car.[4]

Fuel economy was not always an important attribute to new car purchasers. In examining Table 2.1, it can be seen that although fuel economy was considered important enough to be included in many studies, it was only in recent years that it became highly ranked. The Hogarty study of the 1957-71 model year cars, for example, found fuel economy nonsignificant in explaining price variations. In the later studies, however, it is evident that fuel economy was consistantly of greater importance or significance. This result is probably due to the rapid increase in fuel prices since 1974, which forced consumers to become more fuel-conscious.

2.3.2 Purchase Price

Almost all studies listing car attributes included purchase/list price, either as an independent or dependent variable. An examination of Table 2.1 reveals that price, which includes related aspects such as trade-in value and required financing payments, is generally of high importance. For this reason, price is considered a major attribute in the new car

Table 2.1(a)

Significance of Car Choice Attributes[1]

Source	Year of Sample	Sample	Analysis	Attribute Fuel Economy	 Purchase Price	 Quality	 Performance
Triplett (1968)	1960-65	U.S. 4-door sedan models	Regression on Price	-	Criterion	-	N.S. (H.P.)
Hogarty (1975)	1975-71	992 American produced car models	Regression on Price	N.S.	Criterion	-	* (H.P./ weight)
Farley, Howard & Weinstein (1974)	1969	225 Denver sub-compact buyers	Intention to purchase correlations	2/8	8/8	-	4/8
Chatelaine (1973)	1973	1615 Chatelaine subscribers	2nd car purchase feature % mentions	4/8	1/8	-	8/8
Gutman & Marcus (1974)	c.1974	114 car owners	Quality rating correlations	6/6	-	1/6 (workmanship)	
Morris (1978)	1974	124 U.K. auto models	Regression on list price	*	Criterion	-	N.S. (acceleration 0-60 mph)
Love & Train (1979)	1976	U.S. new car buyers	Multinomial logit choice of 10 car types	-	* (cost/ income)	-	N.S. (H.P./ Weight x Age
Manski & Sherman (1980)	1976	1200 U.S. households	Multinomial logit 1-vehicle choice	-	*	-	* (acceleration 0-60 mph)
		445 U.S. households	Multinomial logit 2-vehicle choice	-	*	-	* (acceleration 0-60 mph)

Table 2.1(a) (continued)
Significance of Car Choice Attributes

Source	Year of Sample	Sample	Analysis	Fuel Economy	Purchase Price	Quality	Performance
				Attribute			
Agarwal & Ratchford (1980)	1976	225 N.Y. new car buyers	Hedonic Demand	-	Criterion	-	* (passing time)
Beggs & Caardell (1980)	1977	Baltimore area households	Multinomial logit choice of smallest car	-	N.S.	-	-
Boyd & Mellman (1980)	1977	153 auto models	Random coefficients logit (Hedonic demand)	*	*	-	* (acceleration)
Cardell & Dunbar (1980)	1977	153 auto models	Hedonic demand	*	-	-	*
Automotive News (June 30, 1980)	c.1980	Wright State University poll	Importance	1/5	2/5	5/5	4/5
Kennedy & Thirkell (1981)	c.1980	985 new car Canadian purchasers	Attribute mean levels	1/10	-	8/10 (materials) 6/10 (workmanship)	10/10 (pickup acceleration)

Table 2.1(b)

Significance of Car Choice Attributes

Source	Styling	Handling	Servicing	Operating Costs	Interior Space	Safety	Reliability
Triplett (1968)	-	-	-	-	-	-	-
Hogarty (1975)	-	N.S. (manoeuv-vability)	-	-	*	N.S.	-
Farley, Howard & Warnton (1974)	3/8 (Appearance)	6/8 (Hardness to Drive)	-	7/8	1/8 (Interior Comfort)	5/8	-
Chatelaine (1973)	5/8	2/8 (manoeuvability)	6/8	3/8	7/8	-	-
Gutman & Marcus (1974)	6/7	2/7	-	4/7	5/7 (overall	-	3/7 (durability) comfort)
Morris (1978)	-	-	-	-	-	-	-
Lave & Train (1979)	-	-	-	N.S.	* (# of seats)	-	-
Manski & Sherman (1980)	-	-	-	N.S.	* (excess seats)	-	-
Manski & Sherman (1980)	-	-	-	N.S.	N.S. (excess seats)	-	-
Agarwal & Ratchford (1980)	-	*	-	-	* (rear leg room)	-	-

Table 2.1 (b) (continued)

Significance of Car Choice Attributes

	Attribute						
Source	Styling	Handling	Servicing	Operating Costs	Interior Space	Safety	Reliability
Beggs & Campbell (1980)	-	-	-	*	-	-	-
Boyd & Mellman (1980)	* (length + width ÷ height)	N.S.	*	-	N.S.	-	-
Cardell & Dunbar(1980)	-	-	* (frequency of repair)	-	*	-	-
Automotive News (1980)	-	-	-	-	-	-	3/5
Kennedy & Thirkell (1981)	-	7/10 (ride & handling)	4/10 (non-warranty repair visits) 2/10 (service, repairs done when promised)	3/10 (maintenance costs)	9/10 (interior comfort)		5/10 (days without cars because of repairs)

Notes:

1. Rankings, where given, refer to the subset of attributes listed in this table.

* : Attribute significant at the 0.95 confidence level
N.S. : Attribute not significant at the 0.95 confidence level
- : Attribute not considered in study
Criterion: Attribute was the criterion or dependent attribute.

Sources:

Jack E. Triplett, "Automobiles and Hedonic Quality Measurement," Journal of Political Economy 77 (1968):408-417.

Thomas F. Hogarty, "Price-Quality Relations for Automobiles: A New Approach," *Applied Economics* 7 (March, 1975):41-51.

John U. Farley, John A. Howard and David Weinstein, "The Relationship of Liking and Choice to Attributes of An Alternative and Their Saliency," *Multivariate Behavioral Research* 9 (January, 1974):27-35.

Chatelaine Consumer Council, *The Chatelaine Automotive Study, Ballot #8* (Toronto: MacLean-Hunter, 481 University Avenue, 1973).

Jonathan Gutman and Burton H. Marcus, "The Effect of Adaption Level and Expectation on Satisfaction: Exploring the Howard and Sheth Model of Buyer Behaviour," in *1973 Combined Proceedings*, ed., Thomas V. Greer (Chicago: American Marketing Association, 1974), pp. 223-225.

D. Morris, "Household Production Theory, The Lancaster Hypothesis and the Price-Quality Relationship," *Bulletin of Economic Research* 30 (1978):14-24.

Charles F. Manski and Leonard Sherman, "An Empirical Analysis of Household Choice Among Motor Vehicles," *Transportation Research-A* 14A (1980):349-366.

Manoj K. Agarwal and Brian T. Ratchford, "Estimating Demand Functions for Product Characteristics: The Case of Automobiles," *Journal of Consumer Research* 7 (December, 1980):249-262.

Steven D. Beggs and N. Scott Cardell, "Choice of Smallest Car by Multi-vehicle Households and the Demand for Electric Vehicles," *Transportation Research-A*, 14A (1980):389-404.

J. Hayden Boyd and Robert E. Mellman, "The Effect of Fuel Economy Standards on the U.S. Automotive Market: An Hedonic Demand Analysis," *Transportation Research-A* 14A (1980):367-378.

N. Scott Cardell and Frederick C. Dunbar, "Measuring the Societal Impacts of Automobile Downsizing," *Transportation Research-A* 14A (1980):423-434.

"U.S. Auto Buyers Demanding Quality," *Automotive News*, June 30, 1980, p. 9.

John R. Kennedy and Peter C. Thirkell, "The Effect of Automobile Product Experience on Attribute Disconfirmation Importance," *Proceedings of the Fifth Conference on Consumer Satisfaction, Dissatisfaction and Complaining Behaviour* (1981).

purchase process.

Despite this conclusion on the importance of price, it is recognized that its importance varies under different circumstances. For example, Stewart and Cochrane suggested that price is not a significant factor if consumers believe that price competition is absent (leading them to assume that a long search for a low price is not worth the effort).[5] This view is supported by a Chrysler executive who stated that consumers are willing to pay for what they want so as long as the price is not too unreasonable.[6] On the other side of the issue, however, is a survey by the University of Michigan Institute for Social Research where it was found that high prices are a deterrent to the purchase of a new car and that the market is price-sensitive.[7] The increased usage of car rebates by manufacturers also implies that price is an important factor in the new car purchase.[8]

Certain market segments are especially price sensitive. For example, three independent studies showed that households with high incomes are more willing to pay higher car prices.[9] In another study, the demand for compact, intermediate, and full-size cars appeared more price sensitive than the demand for sub-compact and luxury cars.[10]

In addition to the actual purchase price, other price-related attributes were found important. The decision to sell an existing car is influenced by its trade-in-value.[11] Furthermore, evidence presented in a U.S. study suggested that rising new car prices could be offset by varying the downpayment, interest rate, monthly payment, and contract maturity.[12]

Although price is concluded to be an important attribute, its real role in consumer satisfaction may be related to its role as a quality surrogate. A new car buyer will only become dissatisfied with price to the extent that he paid more, was expecting more, but was disappointed. For example, Adler and Hlavacek found that the acceptable maximum repair cost is disproportional and inversely related to original price.[13] Thus, poor performance on the other attributes will lead the consumer to believe that he paid too much.

2.3.3 Quality

A third major purchase consideration is car quality. Quality-related attributes (such as "value for the money" and "fit and finish"), were becoming more highly-rated attributes,[14] presumably as consumers held their cars for longer periods of time.

As implied, quality was not always an important attribute in the new car purchase. In fact, it has been postulated that during the 1960's the emphasis was on size, power, comfort, and extra features, not on craftsmanship.[15] During the late 1960's and early 1970's, however, consumers began to concentrate more on car quality and "fit and finish" (i.e. superb fit and joinery, high quality paint and finish). Further evidence supporting the growing concern of consumers for car quality was found in a British study where it was concluded that because British cars offered less overall value than imported cars, the foreign share of the U.K. automobile market was increasing.[16]

2.3.4 Performance

Car performance, as measured by horsepower and acceleration, was considered in the majority of studies listed in Table 2.1. Some studies, such as that by Manski and Sherman, found car performance to be a highly significant attribute. While other studies found this attribute to be non-significant or lower-ranked, the frequency of mention suggests it is of least medium importance.

2.3.5 Styling

Styling was included in only a few of the studies in Table 2.1 which examined automobile attributes. However, with the exception of the Boyd and Mellman study, it did not rank highly, perhaps because of difficulties in measurement.

2.3.6 Handling

The handling or ease of manoeuvrability of a car was found to average out to medium importance among those studies in which it was ranked (see Table 2.1). Only in the Agarwal and Ratchford study was this attribute highly significant.

2.3.7 Servicing

A few of the studies in Table 2.1 ranked service-related characteristics such as the frequency of repair. On the basis of these studies, it appeared that these attributes were gaining importance in recent years. In the recent Kennedy and Thirkell study, for example, aspects of servicing as well as features of the new car warranty headed the list of attributes studied. Other recent studies not listed in Table 2.1 concentrated soley on service aspects and warranty features, also underlining the emerging importance of this category of attributes. Servicing characteristics such as prompt work, availability of parts, a good price, and having the job done correctly are of concern to consumers. The number, frequency, and type of repairs covered by the warranty is also of high importance.

2.3.8 Operating Costs

A car's expected operating costs, in addition to fuel expenditures, are also important to new car purchasers. Expenditures for insurance, upkeep, taxes, maintenance, and other running costs are a significant portion of the total cost of owning a car. This is verified by a number of studies in Table 2.1, where operating costs averaged out to be of medium importance.

2.3.9 Interior Space

The space inside a car (which is somewhat related to its size) includes aspects such as interior comfort and seating capacity. Although the relative importance or significance of this attribute varied in the studies listed in Table 2.1, it was concluded that a car's interior space was a meaningful consideration in the new car purchase process.

2.3.10 Safety

Safety is an obvious concern for any new car buyer. However, as indicated in Table 2.1, it was not often considered in the studies of consumer demand. Despite a recent study which showed car makes differ in their collision protection,[18] it is possible that the majority of consumers do not accept it as significant attribute because they cannot accept that they would be involved in an accident.

2.3.11 Reliability

Because car owners tend to keep new cars longer, automobile reliability and durability are important attributes. Table 2.1 reveals that in the few studies where car reliability was ranked, it tended to be relatively highly ranked.

2.3.12 Conclusions

This section has focussed on car attributes of concern to the new car purchaser. While differences were observed to exist across market segments, the following are concluded to be high-ranking attributes for consumers in today's new car market:

Purchase price,
Fuel economy,
Quality,
Servicing, and
Reliability.

This list will be useful for understanding consumer satisfaction and dissatisfaction.

2.4 Product Involvement and Self-Image

The new car purchase is of considerable importance to the purchaser. For example, in the 1979 Ash/CSD survey, it was found that 93.3% of new car buyers ranked their purchase as "highly important".[19] This proportion ranked the new car purchase second highest behind the single family or duplex house purchase (97.3% rating "highly important") among the 225 products and services considered in the 1979 survey. When it is recognized that a house purchase is made less frequently and by a smaller portion of the population (18.5% purchased a single family or duplex house in the past three years vs. 29.8% for a new car),[20] the new car purchase then is the most important purchase for many

Canadians.

There are several reasons for the high importance attached to the new car purchase. The consequences of buying a new car extend into the medium to long term for the consumer in addition to it being an infrequent activity. Consumers also perceive considerable financial risk as well.

Perhaps the greatest reason for the high importance attached to the new car purchase is that automobile models develop very strong brand images.[21] Furthermore, a very large portion of the classic marketing literature exists to show that consumers strive to maintain consistancy between their car image and their own self image.[22] The new car purchase is a very visible expression of self. As Martineau noted: the car not only has mechanical, practical and transportation meanings, but it is also a form of self-expression.[23] The car is what we are or what we would like to be, it implies our status, and it implies personal mastery. Consumers are very involved in their car purchase.

There are several implications of this high importance, high involvement nature of the new car purchase. First, the new car purchase is subject to high levels of what is referred to as post-purchase dissonance.[24] No one car is perfect on all attributes and the new car purchaser needs a great deal of reassurance that he or she has made the right choice. For example, it has been revealed in several marketing studies how consumers after purchase read more ads for their own car and dealer than they did of other cars.[25] New car buyers need a great deal of positive reenforcement and when they don't get it after the purchase or problems arise during the warranty period, their dissatisfaction can be magnified. They need a great deal of positive reinforcement to take them through a difficult period and help them to decide or confirm they made the right choice. The importance of this reassurance was found in a study by Donnelly and Ivancevich who found that the supportive information after the purchase led to less backout on the deal.[26]

The second implication of the high consumer involvement in the new car purchase and its relationship with self image is that consumers cannot associate themselves with cars which do not have a positive image. To the extent that a manufacturer develops a questionnable market image, it will have a detrimental effect upon sales. This is very important to the North American manufacturers, for as will be revealed in the next chapter, cars from these manufacturers are consistently rated lower than imported cars. At some point, patriotism will be set aside and consumers will switch to the imported cars.

The third implication of high consumer involvement with the new car purchase is that it is obviously very susceptible to generating above average levels of complaints. That is, the nature of the product is such that even though it might be equally as "good" as another product of service of less involvement, it will simply generate above average levels of dissatisfaction and complaining behaviour. This is supported by by Czepiel and Rosenberg who argued that appliances, automobiles and furniture generated more complaints simply because of their relatively high costs and psychological importance.[27] This finding would also seem consistent with the Ash study, where 9 out of 12 "Group A priority" categories involved the car or home,[28] and the whole direction of Phase 2 of the consumer satisfaction/dissatisfaction research program (CSD II) where 4 out of the 5 areas of concentration also involve either the house or the automobile. In summary, a relatively high level of dissatisfaction and complaining behaviour among automobiles relative to other products and services is not necessarily an indicator that the automobile purchase is a major consumer problem. The most minor problems (and problems will occur because of the complexity of the product, and everyday usage under a variety of conditions), will be immediately evident and will not be able to be overlooked.

2.5 Post-Purchase Loyalty and Switching Behaviour

A final element of the automobile purchase literature is useful in understanding the consequences of consumer dissatisfaction with the new car purchase. This is the assimilation/contrast effect where consumers tend to become either very satisfied or else very dissatisfied with their new car purchase.[29]

As explained in the previous section, the nature of the new car purchase is such that consumers are very attuned to rationalizing their choice. They look for every piece of information to support their decision and reduce post-purchase dissonance. If all goes well, they will then tend to make the same choice again on a future occasion. For example, in Engel's study, it was found that 60% of recent Chevrolet buyers had owned a Chevrolet before.

However, to the extent that problems arise, there is a point above which consumers fall the other way and every minor incident becomes magnified. And, of course, the intentions to repurchase from the same manufacturer or dealer will then systematically decline as McNeil and Miller found as follows:[31]

Intentions to Purchase

Experience	Manufacturer	Dealer
no troubles	62%	80%
some troubles	48	47

Switching behaviour is not the only consequence of post-purchase dissatisfaction. Givens cites a "black hole" effect where buyers once lost to the import manufacturers are lost forever.[32] Again, a dissonance explanation is involved where the purchaser, who would prefer to either "buy Canadian" or "buy American", has to do a great deal of rationalization to support their import choice. Once gone then, they are almost impossible to bring back.

The final consequence of post-purchase dissatisfaction is the strong word-of-mouth influence on other purchasers. For example, McNeil and Miller found that among those who had no troublesome experience, 59% made positive recommendations to others of which one third took their advice.[33] Of those purchasers who had trouble or delay, 71% gave no positive recommendations and 41% of these actually advised another not to buy from the dealer. Clearly, consumer dissatisfaction can have a multiplying effect.

2.6 Conclusions

Today's new car purchaser selects their vehicle by comparing the alternatives on price, fuel economy, quality, reliability, and servicing requirements. Dissatisfaction will occur if a new car fails to meet the purchaser's expectations on these attributes. Also important are performance, handling, styling, operating costs, interior space, and safety (Section 2.3).

Post-purchase followup by the manufacturer and dealer is critical to ensuring consumer satisfaction. Post-purchase dissonance is especially great with the new car purchase and consumers not only need a great deal of help in rationalizing their choice but will also be acutely sensitive to any problems or difficulties they encounter in the post-purchase period (Section 2.4).

The new car purchase tends to generate a higher degree of dissatisfaction and complaining behaviour relative to other products and services, not because of any greater failing by the automobile industry, but simply because of the nature of the product itself and associated purchasing behaviour. The new car purchase to many consumers is the most important purchase they make and all are highly involved, not only because of its everyday and long-lasting significance, but because of its relevance to self. If problems occur, this product, unlike others, cannot be ignored or easily discarded (Section 2.4).

The new car purchaser is also distinguishable from the general population and shares similarities with the complainer in their high socio-economic status and degree of community participation. In other words, there is a greater proportion of complainers among new car purchasers than in the general population (Section 2.2).

Footnotes

[1] B.C. Isherwood and J.F. Pickering, "Factors Influencing Individual Purchases of Motor Cars in Great Britain," Oxford Bulletin Economics and Statistics 37 (August, 1975):227-249.

[2] Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

[3] This study was conducted by the Newspaper Advertising Bureau and was cited in "Multicar Families on the Rise, Ad Bureau Study Finds," Automotive News September 11, 1980, p. 3.

[4] See, for example, "GM Chairman Roger Smith," Automotive News, November 9, 1981, p. E-4.

[5] David Stewart and Stuart Cochrane, "UK Car Market: A Cross-Section Study, 1977-80", Paisley College, 1981.

[6] Jack Givens, "Automobile Industry, Heal Thyself," Advertising Age, September 29, 1980, pp. S-32, S-33.

[7] "Auto-buying Mood Remains Gray," Automotive News, August 24, 1981, p. 33.

[8] Mack Webb, "Do Cash Rebates Impact on Sales?," Automotive News, August 4, 1980, p. 22. This article, however, suggests some disagreement among car dealers about the effectiveness of rebates.

[9] This result has been found in Steven D. Beggs and N. Scott Cardell, "Choice of Smallest Car by Multi-Vehicle Households and the Demand for Electric Vehicles," Transportation Research-A 14A (1980):389-404; Jenny L. King, "Almighty Dollar-Top Priority," Automotive News, November 3, 1980, p. E-16; and Charles F. Manski and Leonard Sherman, "An Empirical Analysis of Household Choice Among Motor Vehicles," Transportation Research-A 14A (1980):349-366.

[10] Rodney L. Carlson, "Seemingly Unrelated Regression and the Demand for Automobiles of Different Sizes, 1965-75: A Disaggregate Approach," Journal of Business 51(2) (1978):243-262.

[11] A.G. Armstrong and J.C. Odling-Smee, "The Demand for New Cars II - An Empirical Model for the U.K.", Oxford Bulletin of Economics and Statistics 41 (August 1979):193-214.

[12] Bruce Seaton and Ronald H. Vogel, "Price Structure as a Marketing Variable: An Experimental Investigation," Journal of Business Research 8 (September, 1980):315-327.

[13] Lee Adler and James F. Hlavacek, "The Relationship Between Price and Repair Service for Consumer Durables," Journal of Marketing 40 (April, 1976):80-82.

[14] "U.S. Auto Buyers Demanding Quality," Automotive News, June 30, 1980, p. 9.

[15] Charles G. Burck, "A Comeback Decade for the American Car," Fortune, June 2, 1980, pp. 52-56, 58, 63, 65.

[16] Stewart and Cochrane, "U.K. Car Market".

[17] See, for example, John A Martilla and John C. James "Importance-Performance Analysis," Journal of Marketing 41 (January, 1977):pp. 77-79, which discusses the importance of various car service attributes, and Kenneth McNeil and Richard E. Miller, "The Profitability of Consumer Protection: Warranty Policy in the Auto Industry," Administrative Science Quarterly 25 (September, 1980):pp. 407-427, for a discussion of car warranty features.

[18] Helen Kahn, "Large Cars, U.S. Models Safer, Insurers Report," Automotive News, January 18, 1982, pp. 32-34.

[19] Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Directions for Action (Ottawa: Consumer and Corporate Affairs Canada, May, 1980), p. 38.

[20] Ibid., pp. 35, 38.

[21] See, for example, Marcus Felson, "Invidious Distinctions Among Cars, Clothes and Suburbs," Public Opinion Quarterly (1978):49-58; Edward L. Grubb and Gregg Hupp, "Perception of Self, Generalized Stereotypes, and Brand Selection," Journal of Marketing Research 5 (February, 1968):58-63; Robert B. Settle and L. Bruce Gibby, "The Measurement of Attributed Image," California Management Review 14 (Summer, 1972):70-74; William D. Wells, Frank J. Andriuli, Fedele J. Goi, and Stuart Seader, "An Adjective Check List For the Study of "Product Personality," Journal of Applied Psychology, 41 (5) (1957):317-319; Ralph

Westfall, "Psychological Factors in Predicting Product Choice," Journal of Marketing 26 (April, 1962):35-40. The industry recognizes these images as well as can be seen in Ralph Gray, "Kehrl Disputes Study on Role of Car Size," Advertising Age, August 3, 1981, p. 61.

[22] A. Evans Birdwell, "Influence of Image Congruence on Consumer Choice," in Reflections on Progress in Marketing, ed., L. George Smith (Chicago: American Marketing Association, 1965), pp. 290-303; Franklin B. Evans, "Psychological and Objective Factors in the Prediction of Brand Choice: Ford Versus Chevrolet" Journal of Business 32 (October, 1959):340-69; Edward L. Grubb and Gregg Hupp, "Perception of Self, Generalized Stereotypes and Brand Selection," Journal of Marketing Research 5 (February, 1968):58-63; Kevin F. McCrohan, "An Application of the Social Character Construct in Market Segmentation," Journal of the Market Research Society 22 (October, 1980):263-267; J. Paul Peter and Lawrence X. Tarpey, Sr., "A Comparative Analysis of Three Consumer Decision Strategies," Journal of Consumer Research 2 (June, 1975):29-37; Ivan Ross, "Self-Concept and Brand Preference" Journal of Business 44 (1971):38-50.

[23] Pierre Martineau, "An Automobile for Every Personality," Motivation in Advertising (New York: McGraw-Hill Book Company, Inc., 1957), pp. 66-80.

[24] Gerald D. Bell, "The Automobile Buyer after the Purchase," Journal of Marketing 31 (July, 1967):12-16.

[25] Danuta Ehrlich, Isaiah Guttman, Peter Schonbach, and Judson Mills, "Postdecision Exposure to Relevant Information," Journal of Abnormal and Social Psychology 54 (1957), 98-102; James F. Engel, "Are Automobile Purchasers Dissonant Consumers?" Journal of Marketing 27 (April, 1963), 55-58 (dealers but not manufacturer's advertising); Ian Hare, "Cognitive Dissonance and the New Car Buyer: A British Study," Quarterly Review of Marketing (Spring, 1977):1-3, 7.

[26] James H. Donnelly, Jr., and John M. Ivancevich, "Post-Purchase Reinforcement and Back-Out Behavior," Journal of Marketing Research 7 (August, 1970):399-400.

[27] John A. Czepiel and Larry J. Rosenberg, "The Study of Consumer Satisfaction: Addressing the 'So What'?" in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, ed., H. Keith Hunt, (Cambridge, Mass.: Marketing Science Institute, 1977), p. 107.

[28] Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behavior, p. 20.

[29] See, for example, Ralph E. Anderson, "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance," Journal of Marketing Research 9 (February, 1973):38-44.

[30] Engel, "Are Automobile Purchasers Dissonant Consumers?"

[31] McNeil and Miller, "The Profitability of Consumer Protection".

[32] Jack Givens, "Automobile Industry, Heal Thyself," Advertising Age, September 29, S-32, S-33.

[33] McNeil and Miller, "The Profitability of Consumer Protection".

Chapter 3

CONSUMER SATISFACTION, DISSATISFACTION AND COMPLAINING BEHAVIOUR REGARDING THE NEW CAR PURCHASE

Chapter 3

CONSUMER SATISFACTION, DISSATISFACTION AND COMPLAINING BEHAVIOUR REGARDING THE NEW CAR PURCHASE

3.1 Introduction

In the previous chapter, an overview was made of the automobile purchase process. Numerous studies were reviewed regarding various aspects of the new car purchase. An attempt was made to highlight elements of the purchase process which might explain consumer dissatisfaction.

The objective of this chapter is to focus upon studies dealing with new car purchase satisfaction, dissatisfaction, and complaining behaviour. As will be revealed, various surveys have been conducted which compare new car satisfaction with the satisfaction associated with other products and services. Other surveys consider only the automobile purchase. Thus, in total, these studies examine automobile satisfaction on both a relative and absolute basis.

This chapter first provides a conceptual framework for organizing and presenting the various studies. Subsequent sections of this chapter then consider studies relevant to each component of the conceptual model. These elements are consumer experience and expectations, objective and perceived product performance, consumer satisfaction and dissatisfaction with the new car purchase, and consumer complaining behaviour following an unsatisfactory new car purchase.

3.2 Conceptual Framework

Various conceptual frameworks exist to explain consumer satisfaction, dissatisfaction and complaining behaviour.[1] An integration of these frameworks is presented in Figure 3.1, a process model following the precedents set by Day, Gilly, and others.[2] The elements of this model and related studies are examined in turn.

3.3 Consumer Experience and Expectations

The consumer enters the car purchase process with some degree of prior experience and with specific needs. Experience is further qualified by word-of-mouth, manufacturer's reputation and advertising, as well as prior levels of satisfaction/ dissatisfaction and the consequences of any previous complaining behaviour.

As a result of this experience, the consumer develops varying expectations with respect to a new car purchase. These expectations may or may not be realistic, depending upon the adequacy of the information available to the consumer. Day has further classified these expectations as those not only concerning the anticipated benefits from the car performance but also expectations regarding anticipated monetary and shopping costs as well as the expectations of the anticipated impact of

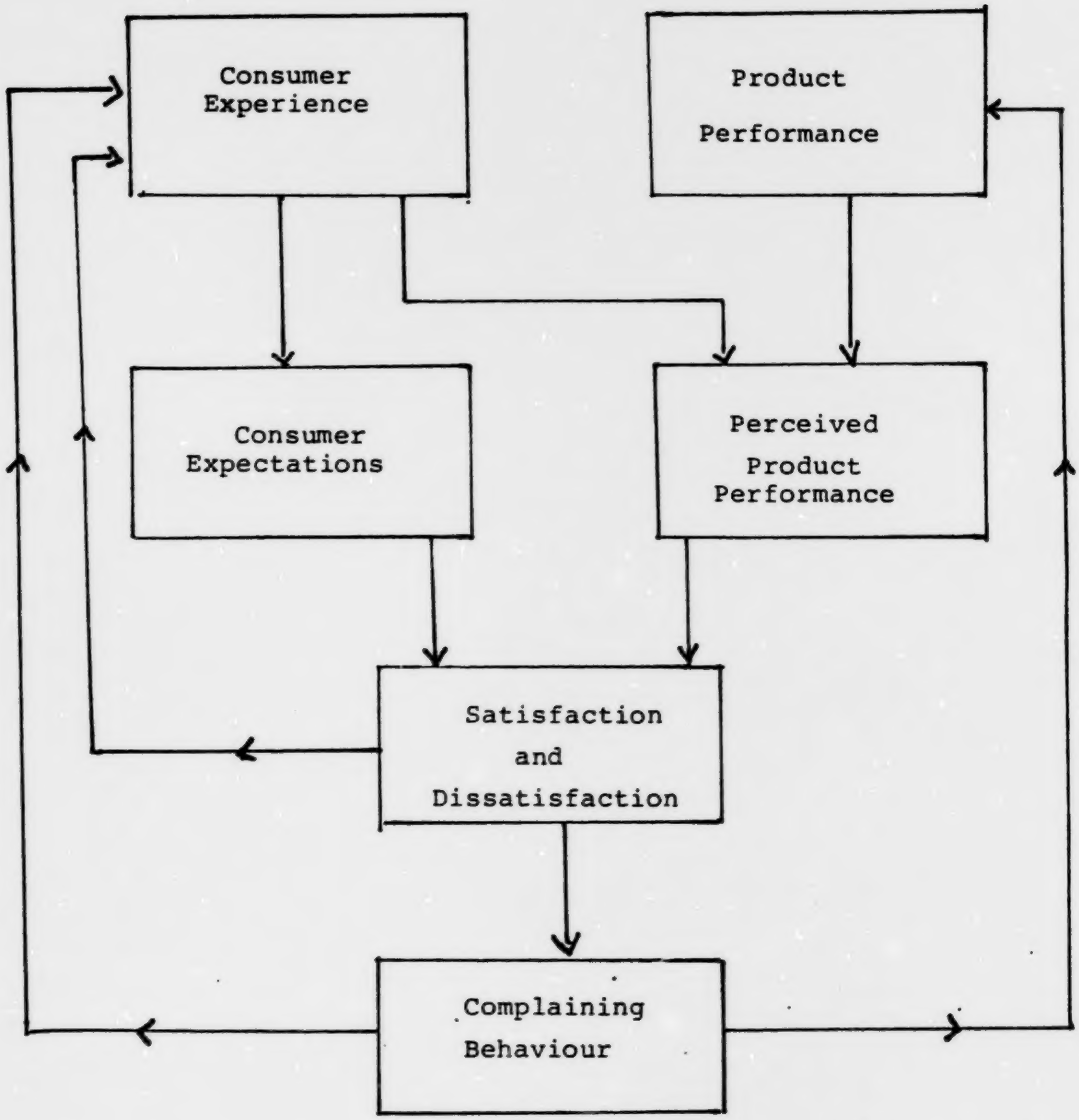

Consumer Experience
Product Performance
Consumer Expectations
Perceived Product Performance
Satisfaction and Dissatisfaction
Complaining Behaviour

Figure 3.1

A Process Model of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour the car purchase on others.[3]

One indication of consumer expectations is found in a study by Miaoulis and O'Brien conducted on two occasions among a Dayton, Ohio panel of households.[4] Selected results are as follows:

Question/Response	1980	1981
Best over all subcompact?		
American	20%	22%
Japanese	35	54
Other foreign	45	24
	100%	100%
Most reliable subcompact?		
American	22%	24%
Japanese	33	49
Other foreign	45	27
	100%	100%

Thus, at least as far as subcompact cars are concerned, consumers enter the purchase process with a relatively low regard for domestic cars and a growing, high regard for the Japanese imports.

Another study which examined consumer expectations is found in Thirkell's doctoral dissertation.[5] In his research, Thirkell sampled 1979 and 1980 new car buyers from British Columbia, Manitoba, Ontario and Nova Scotia who recently bought either a Chevette, Malibu, Impala or Camero from a General Motors dealer. Expectations with respect to 20 specified product attributes generated from previous automobile surveys and in consultation with the cooperating automobile manufacturer were obtained on 5-point semantic differential scales ranging from "Poor" to

"Excellent". The results for the four automobile makes are found in Figures 3.2 through 3.5. With the Chevette presumed to be the compact car, the Malibu the intermediate, the Impala the full-size, and the Camaro a "sports" car,[6] several observations about consumer expectations could be made.

The highest levels of expectations were associated with service-related attributes. Consumers held the highest expectations with respect to their beliefs that they would spend few days without their vehicle, that service and repairs would be done when promised, that service people would have the right attitude, and that service people would understand consumer problems. Following the consumer model postulated in Section 3.2, it would therefore be expected that failures in these areas will generate the highest levels of consumer dissatisfaction.

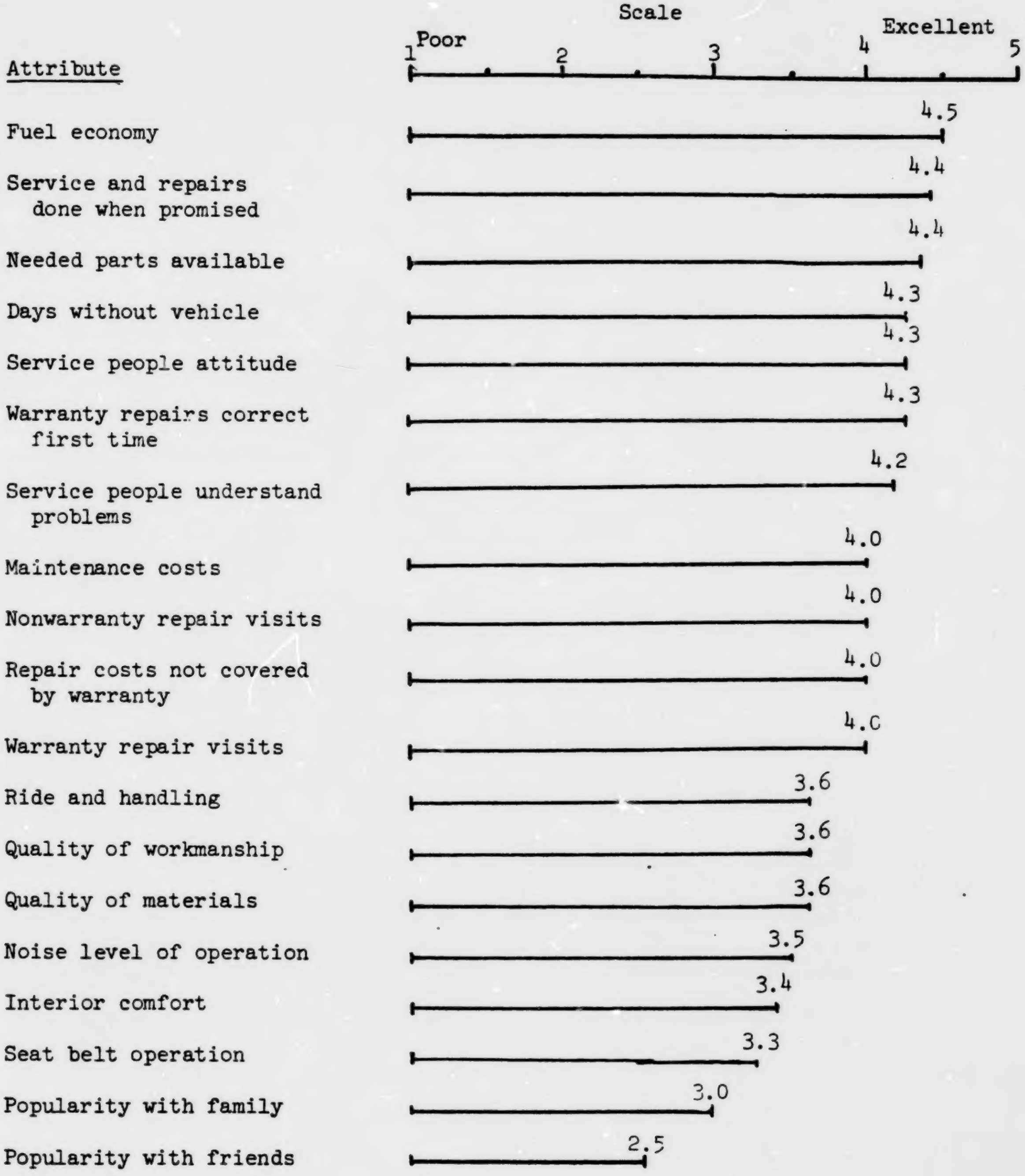
At a more intermediate expectation level were attributes related to nonwarranty and warranty repair visits. The warranty attributes were concerned with warranty repairs being correct the first time, that warranty repair visits will be satisfactory, and that there will be few repair costs not covered by warranty.

At a lower level of expectation were attributes concerned with product quality. Across all four makes and sizes of automobile, consumer expectations regarding quality of materials and quality of workmanship were in the bottom half of the rank-ordered list of attributes.

At the lowest expectation levels were attributes concerned

Figure 3.2

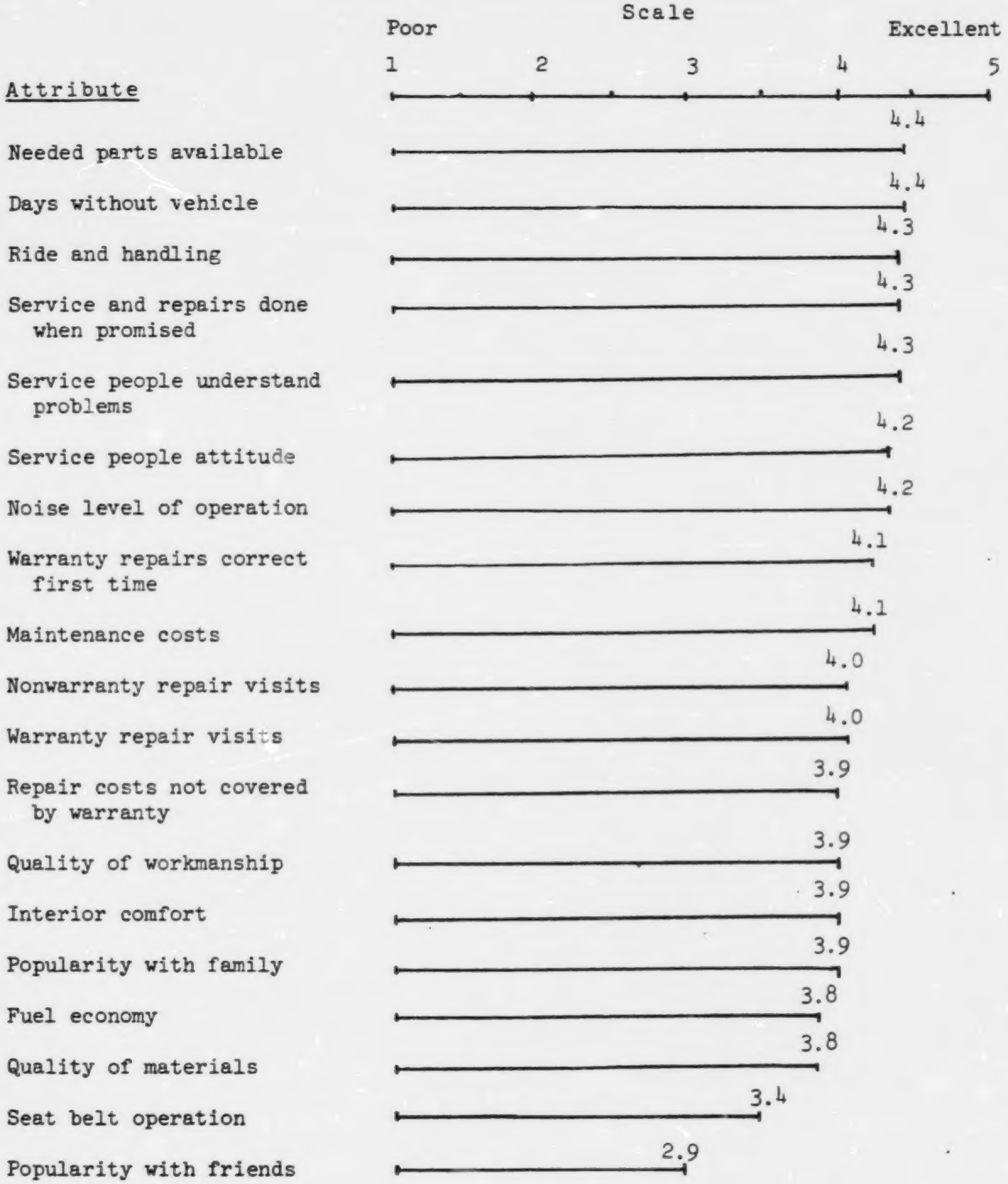
Chevette (Compact) Mean Expectation Levels by Attribute (N=320)



Source: Adopted from
Peter C. Thirkell, "Consumer Expectations Disconfirmation and Satisfaction," (Ph.D. dissertation, The University of Western Ontario, 1980), p. 102.

Figure 3.3

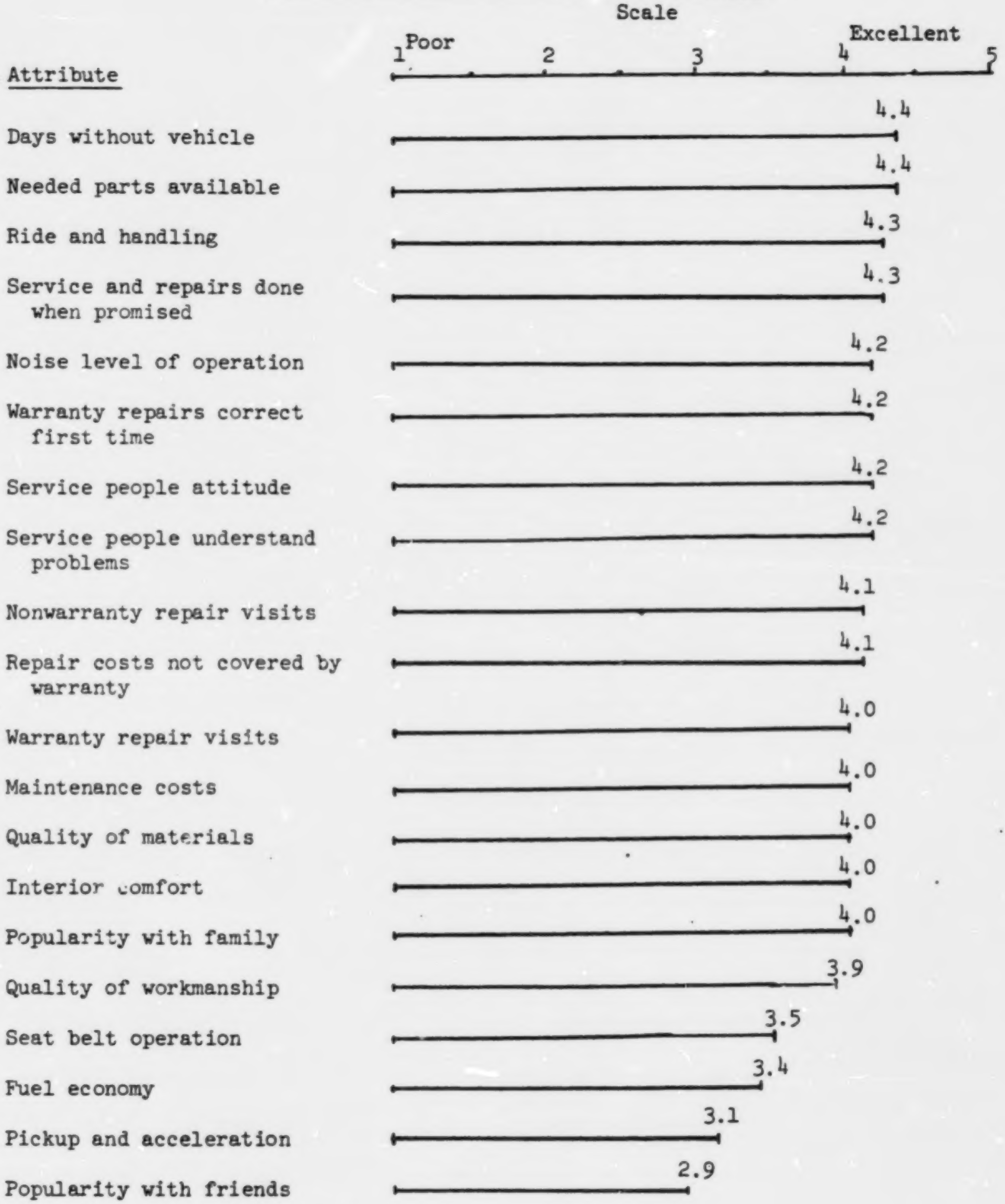
Malibu (Intermediate) Mean Expectation Levels by Attribute (N=213)



Source: Adopted from
Peter C. Thirkell, "Consumer Expectations Disconfirmation and Satisfaction," (Ph.D. dissertation, The University of Western Ontario, 1980), p. 102.

Figure 3.4

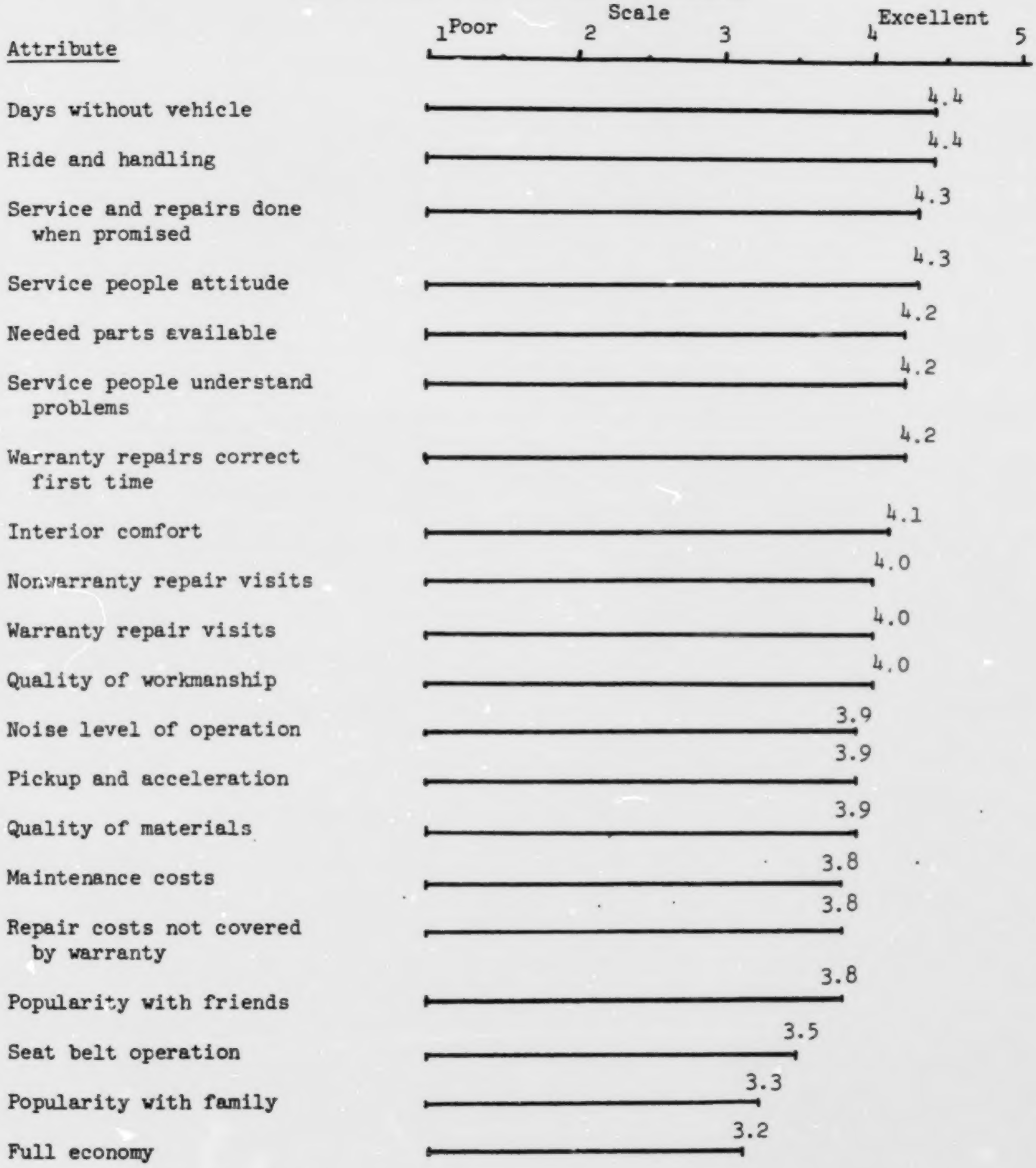
Impala (Full Size) Mean Expectation Levels by Attribute (N=208)



Source: Adopted from
Peter C. Thirkell, "Consumer Expectations Disconfirmation and Satisfaction," (Ph.D. dissertation, The University of Western Ontario, 1980), p. 102

Figure 3.5

Camero (Sports) Mean Expectation Levels by Attribute (N=240)



Source: Adopted from

Peter C. Thirkell, "Consumer Expectations Disconfirmation and Satisfaction," (Ph.D. dissertation, The University of Western Ontario, 1980), p. 102

with interior comfort, seat belt operation, and popularity with friends and family. Expectations regarding interior comfort, however, were at an intermediate level for sports cars and large size cars.

Varying levels of expectations were observed for other attributes. For example, fuel economy was the first-ranked attribute for the Chevette but bottom-ranked for the intermediate, full-sized and sports models. Expectations regarding ride and handling were the opposite, with this attribute being bottom-ranked for the compact and top-ranked for the other three models. Expectations regarding noise level of operation also rose with the size of the car.

In summary, consumers enter the new car purchase with high expectations regarding dealer service, with intermediate expectations regarding warranties and repairs, and with low expectations regarding operating comfort and quality of materials and workmanship. These differences will be useful in interpreting subsequent dissatisfaction studies.

3.4 Objective Product Performance

This element of the model recognizes an objective consequence or fact of the new car purchase based upon the manufacturing process, the dealer's handling of the sale, and the manufacturer's and dealer's response to post-purchase problems. It was Olander's view, in fact, that only such objective indicators of product performance be used in assessing consumer welfare, rather than using perceived product performance.[7]

In this section, an attempt is made to identify objective, documented evidence of new car purchase problems. Sources of such evidence are tests by independent government or private organizations or judgements from either criminal or civil litigation.

3.4.1 Quality of Materials, Design and Workmanship

Premature Rusting. Evidence of premature rusting of the automobile is found in two court cases.[8] In the case of a 1971 Ford Torino station wagon, the trial judge concluded "that the principal cause can only be related to defects in the metals used in the manufacture of the vehicle" (p. 349). In the case of a 1974 Mazda RX4, "the blistering condition of the paint work is due to the excessive permeability of the paint film...due to a defect in manufacture" (p. 194).

Defective Vehicles. Two court cases established new car defects.[9] In the first case involving 84 Ford cars manufactured in 1964 through 1974, the "failure of [a] bushing resulted in separation of an idler arm [in turn resulting] in unexpected loss of steering control." A second case involving a 1975 Dart revealed "the leaking of water in the trunk, the leaking of oil in the power steering, and the falling off of the drive shaft".

Miscellaneous. Edmonston cited numerous U.S. court cases which identified faulty new cars.[10] These court cases not only identified the rust problem described above but also problems related to the accelerator, rear axle, brake, fan blade, gear shift, head restraint, seat belt, hood, shock absorber, steering, transmission, wheel, seat, gas tank, motor mounts, and door latch. Problems with the Pinto gas tank were also discussed by Dowie.[11] Evidence of faulty design in the Corvair was provided by Nader.[12]

3.4.2 Warranty Support

At least two Canadian court cases provided evidence of warranty problems.[13] In both cases, one involving a 1972 Fiat and the other a 1968 Oldsmobile, it was revealed that new car deficiencies were not corrected during the warranty period. As a consequence, the court cancelled the sales and refunded the purchase price. Edmonston cited similar judgements arising out of U.S. litigation.[14]

3.4.3 Fuel Consumption.

Of relevance to high consumer expectations regarding subcompact fuel economy is the analysis reported by MacDonald which revealed the following:[15]

	Fuel Consumption (litres/100 km)	
Manufacturer	1980	1981

North American	8.7	8.1
Japanese	8.2	7.1

Thus, fuel economy is not as high for the North American produced cars as it is for the Japanese automobiles.

3.4.4 Conclusions Regarding Objective Product Performance

The litigation and analysis reported in this section provide objective evidence of new car problems. Although it is not extensive, this evidence points to problems in the manufacturing of the new car and subsequent warranty support. Potential problem areas such as misleading advertising, salesman misrepresentations, pricing and credit problems, however, were not evident.

The litigation cited represents only the conclusions of various appeals and is likely only a fraction of cases which weren't appealed. A systematic review of all new car litigation would be useful research for a future occasion.

3.5 Perceived Product Performance

Perceived product performance may differ from actual product performance.[16] Buyer expectations and other facets of the consumer's experience can alter the consumer's view of the purchase. As Day and others pointed out,[17] the consumer's perception of performance can either be altered toward higher expectations (assimilation) or magnified away (contrast), according to the initial difference between performance and expectations.

Turning now to the subjective evidence, a review of the available evidence indicates new car problems in three major areas: product quality, warranty performance, advertising, salesforce and dealer representations, and pricing and credit. Each problem is discussed in turn.

3.5.1 Quality of Design, Materials, and Workmanship

The consumer's perception of quality relates to three major areas. These areas are materials, workmanship and performance.

Materials. In two studies, one from the U.S. and the other from Canada, quality of materials was identified as a major problem in new car purchase.[18] In both studies, respondents were asked to identify the most unsatisfactory purchase among cars and other transportation items, as well as to check off reasons for the dissatisfaction. Each respondent was then asked to identify the reason which they felt was most important in contributing to their dissatisfaction. The results are found in Table 3.1.

In the U.S. study, 63% of the respondents checked the reason "The quality of materials was inferior." Approximately one in five respondents identified this reason as the most important reason for their dissatisfaction.

In the Canadian study, 50% of the respondents mentioned

Table 3.1

Quality of Design, Materials, and Workmanship as Reasons for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The quality of workmanship was inferior	50%	13%	42%	17%	54%	19%
The product did not perform as well or last as long as advertising claims led me to believe	N.A.	N.A.	35	10	43	16
The quality of materials was inferior	63	22	50	20	51	14
The product was damaged when delivered	17	0	10	2	11	0
The product was/is unsafe	29	9	17	7	0	0
The instructions for using the product were incomplete or impossible to read	4	0	3	0	0	0

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in *Advances in Consumer Research, Vol. VI*, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, *Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada*, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

quality of materials and 20% identified this reason as the most important one for dissatisfaction. When these results were broken down to those applying only to the new car purchase, the corresponding percentages were 51% and 14%.

Workmanship. The same two studies elicited consumer responses to the reason "The quality of workmanship was inferior."[19] In the U.S. study, 50% of the respondents mentioned this reason and 13% identified it as most important. In the Canadian study, the corresponding proportions were 42% and 17%. Broken down among new car purchasers only, the proportions were 54% and 19%.

Performance. Other statements in the same two studies also indicated that the new car did not match up with expectations.[20] For example, 43% of the new car purchasers sampled agreed that "The product did not perform as well or last as long as the advertising claims led me to believe." A total of 16% of the respondents gave this as the most important reason.

A February, 1980 survey among 1200 Canadian car owners in Manitoba, Ontario and Quebec suggested quality differences in cars produced among the different manufacturers.[21] More than 2/3 (68.7%) of import owners indicated that they were happy with the reliability of their cars compared to only one half of the owners of North American-produced vehicles. General Motors ranked highest among North American manufacturers in terms of reliability of cars produced followed by Ford, American Motors and Chrysler, in that order.

In terms of quality control, premature rusting and poor paint adhesion led to consumer dissatisfaction. For purchasers of North American-made cars, owners of American Motors vehicles were the most satisfied with respect to quality control, followed by Ford with General Motors and Chrysler owners the least satisfied.

3.5.2 Warranty Performance

Several studies revealed that consumers were dissatisfied with the performance of dealers and manufacturers under the terms of the warranties. For example, in the U.S. study by Day and Ash and the Canadian study by Ash, the proportions of purchasers of cars and other transportation items whose purchase was the most unsatisfactory, and who mentioned warranty-related reasons as the most important reason for dissatisfaction, totaled 24% and 18% respectively (see Table 3.2).[22] Over 1 in 3 dissatisfied purchasers mentioned a warranty reason.

In a study by McNeil and Miller, an average of 50 buyers from each of 33 Wisconsin area dealerships were surveyed two months after the car's registration in the Fall of 1976 and again after one year.[23] Their results revealed that 48% of all the buyers sampled reported some troublesome experience during the first year, 27% had delays getting the most important trouble fixed, and 14% were left with an unresolved problem one year

Table 3.2

The Warranty as a Reason for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The warranty did not cover all of the things that went wrong	46%	9%	26%	7%	35%	11%
Repairs or services under the warranty were unsatisfactory	25	13	29	4	35	8
The warranty was not as extensive as the general impression created in advertising	N.A.	N.A.	15	3	14	5
The warranty was not honoured	N.A.	N.A.	12	2	11	0
The store was unwilling to provide a refund or an exchange	N.A.	N.A.	10	2	8	0

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in Advances in Consumer Research, Vol. VI, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

after purchase. McNeil and Miller hypothesized that if their sample results were extrapolated to the population, it meant that there were 1 1/2 million buyers from the 1977 model year who had unresolved warranty problems.

McNeil and Miller's study also suggested significant differences in servicing experiences across manufacturers, as revealed in the following table:

Percentage of Total Buyers with These Experiences

Services Experience	GM	Ford	Chrysler	AMC
No troublesome experiences	53%	59%	40%	47%
Some troublesome experiences	47	42	16	53
Resolved without delay	20	18	27	29
Some delay or problem	27	23	33	24
Resolved after delay	14	10	15	12
Not resolved	13	13	18	11

McNeil and Miller also emphasized manufacturer differences by citing Allstate Insurance research which indicated large variations across models in collision repair cost and personal injury payment.

A Canadian study by Romero emphasized the link between consumer dissatisfaction and poor warranty performance.[24] In addition to reviewing various U.S. studies, Romero conducted his own study of 323 Ontario new car owners in April, 1971. His results revealed that 51% of his respondents required some repairs under warranty, of which only 44% were successful in having the defects fixed. He also found that 59% of respondents who had a defect had to return more than once to get the car repaired. Romero added that it was not the warranty work itself which led to dissatisfaction but rather whether or not the work was done successfully and free of charge.

A U.S. study conducted by Gaedeke at approximately the same time found automobiles ranked first among five products that accounted for most warranty and/or guarantee complaints among 32 state agencies and 15 voluntary organizations.[25]

Richardson and Fogg provided another perspective on warranty performance when they surveyed new car owners at Baton Rouge, Louisianna.[26] This research revealed that warranty expiration resulted in a major shift of car owners from dealers to independents for both service and repair work. Respondents felt that the independents were superior to the dealers on speed of service, personal attention, quality of service, and prices.

3.5.3 Advertising

As indicated in Table 3.3, many advertising-related reasons were mentioned by respondents in Ash's Canadian study. However, the problem appears to center on the product and warranty not

Table 3.3

Advertising as a Reason for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The product did not perform as well or last as long as advertising claims led me to believe	N.A.	N.A.	35%	10%	43%	16%
The warranty was not as extensive as the general impression created in advertising	N.A.	N.A.	15	3	14	5
The product did not correspond to the general impression created in an advertisement	N.A.	N.A.	15	2	8	0
The product was misrepresented in advertisements	0	0	N.A.	N.A.	N.A.	N.A.
The price that was charged was higher than the advertised price	N.A.	N.A.	7	0	0	0

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in Advances in Consumer Research, Vol. VI, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Bae" (Kingston: School of Business, Queen's University, February, 1982).

matching up with the expectations created by the advertising. Presumably, there would be little or no advertising problems if product quality and warranty performance were satisfactory.

3.5.4 Salesforce and Dealer Representation

Closely related to, but not necessarily arising out of warranty support, is dealer service. Dealer service is important to consider because consumer expectations are high on this characteristic, as shown in Section 3.3. As the president of General Motors stated, "Comeback - that is, customers taking their cars back to the dealer more than once for the same problem - is the highest single reason for customer dissatisfaction."[27]

Swan and Longman demonstrated the link between consumer satisfaction and dealer service.[28] In their study of Austin, Texas new car purchasers, they found that more repairs were associated with less satisfaction. Less satisfaction in turn was associated with lower levels of agreement concerning the automobile industry as a place where the market protected the consumer against poor quality.

Problems related to the dealer and his salesforce are presented in Table 3.4. While there is evidence of unfulfilled expectations due the representations of these individuals, the proportions are not as large as those associated with product quality or warranty performance. Furthermore, there appears to

Table 3.4

Salesforce and Dealer Representations as Reasons for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The product had drawbacks that I was not told about when I bought it	42%	22%	34%	7%	24%	3%
The dealer misrepresented his ability to provide parts and service for the product	21	4	11	2	16	0
The product was misrepresented to me by the salesman	25	9	12	2	5	0
The item that was delivered was different than the one I bought	0	0	2	0	0	0

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in *Advances in Consumer Research, Vol. VI*, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, *Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada*, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

be a slightly greater problem with the dealer and the salesman among U.S. purchasers than among Canadian purchasers.

3.5.5 Pricing and Credit Practices

Table 3.5 presents reasons for dissatisfaction related to pricing and credit practices. Effectively, the proportions of dissatisfied purchasers relating reasons in this area is nil. Even the large 16% total mentions for "lack of using the product" could be attributed to failure in product quality or warranty performance.

3.5.6 Miscellaneous Reasons

Nearly 1 in 4 mention a reason not already listed (see Table 3.6). Energy concerns were explicitly mentioned by 14% of dissatisfied new car purchasers who said it was the most important reason.

3.5.7 Conclusions Regarding Perceived Product Performance

Consumers perceptions of product performance match the limited evidence on objective product performance. The major problem areas are quality of materials and workmanship and warranty performance, with differences occuring across manufacturers. Concerns were also evident regarding advertising representations but only because the product did not match the expectations created in the ads. Pricing and credit problems

Table 3.5

Pricing and Credit as Reasons for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The cost of using the product is higher than I was led to believe	38%	0%	16%	2%	16%	0%
The credit terms were misrepresented to me	4	0	2	0	3	0
The price that was charged was higher than what I had agreed to pay	0	0	2	1	5	0
The price that was charged was higher than the advertised price	N.A.	N.A.	7	0	0	0
The product advertised as a "special" or "bargain" was unavailable at the store	N.A.	N.A.	2	0	3	0
I was tricked by a salesman into buying a more expensive model than I needed	0	0	4	0	8	0

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in Advances in Consumer Research, Vol. VI, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

Table 3.6

Miscellaneous Reasons for Dissatisfaction

	U.S.A.		Canada			
	Cars and Other Transportation (n=24)		Cars and Other Transportation (n=137)		New Cars (n=37)	
Reason	Total Mention	Most Important	Total Mentions	Most Important	Total Mentions	Most Important
The product wasted energy resources	13%	0%	14%	1%	14%	0%
I had to wait a long time before the product was delivered	17	0	4	2	3	0
The product is bad for the environment	13	0	N.A.	N.A.	N.A.	N.A.
Other reasons not listed above	N.A.	N.A.	19	10	19	24

Source: For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in Advances in Consumer Research, Vol. VI, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For "New Cars", see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analysis of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

were not apparent.

3.6 Consumer Satisfaction and Dissatisfaction with the New Car Purchase

The central element of most consumer satisfaction/ dissatisfaction (CSD) models is that the level of satisfaction is dependent upon both expectations and perceived product performance.[29] Consumer dissatisfaction rises according to the degree to which the perceived new car performance falls short of prior expectations.

Several refinements on the CSD construct have been provided by consumer behaviouralists. For example, Swan and Combs equated satisfaction with the attainment of expressive outcomes (nonmaterial, psychological) and dissatisfaction with instrumental outcomes (physical attributes).[30] That is, some attributes of the product are important in determining satisfaction while other attributes are related to dissatisfaction when the performance on these attributes is not satisfactory.

Westbrook recognized that variables other than expectations and perceived performance may impact upon satisfaction.[31] His findings support the proposition that product satisfaction can also be explained as a function of broader affective and attitudinal influences such as life satisfaction and generalized discontent.

3.6.1 Levels of Satisfaction/Dissatisfaction

Twelve independent studies summarized in Table 3.7 indicated the relative level of satisfaction which occurred as a result of the new car purchase.[32] The new car purchase consistently ranked as the most, or one of the most, troublesome consumer purchases among a wide variety of products and services. The proportion of unsatisfied purchasers ranged between approximately 10% and 30%.

3.6.2 Manufacturer Differences in New Car Purchaser Satisfaction

As was the case with perceived product performance, overall consumer satisfaction/dissatisfaction differed across car manufacturers. For example, MacDonald analyzed the ratings of 1979 passenger cars as to "the incidence of complaints about the specific model and year, as compared with complaints about all cars of the same year."[33] This analysis was based on the responses of 250,000 of Consumer's Union members to an annual questionnaire. As indicated in Table 3.8, 33% of 55 North American models were rated "Much Worse than Average" or "Worse than Average" compared to 0% of 19 import models.

A similar analysis was made of Consumers Union 1981 "Trouble Index" ratings based on 1980 cars.[34] As summarized in Table 3.9, 54% of 72 North American models rated "Much Worse than Average" or "Worse than Average" compared to 0% of 33 import models.

In late 1980 and early 1981, the Canadian Automobile Association distributed questionnaires to Canadian motorists

Table 3.7

NEW CAR PURCHASE SATISFACTION/DISSATISFACTION

Reference	Year	Location		Result
Gaedeke (1972)		U.S.A.	a.	"New automobiles - Sales and Service" ranked 1st among 8 categories of product, service and/or method of sale, generating most complaints among 32 state agencies and 15 voluntary organizations.
			b.	Automobiles ranked 1st among 5 products that accounted for most warranty and/or guarantee complaints among 32 state agencies and 15 voluntary organizations
Day and Landon (1975)	Fall 1974	Boulder, Colorado	a.	29 of 275 or 11% mentioned "Purchase of a New Car" among 3 items which were the least satisfactory durable. This proportion was the largest among 75 durables.
			b.	25 of 275 or 9% identified the "Purchase of a New Car" as "The Least Satisfactory Durable. This proportion was the largest among 75 durables.
Thomas and Shuptrine (1975)	Spring 1974	Columbia, S.C.	a.	31% of 937 who owned an automobile had a problem, ranking this proportion 2nd highest among the 46 named products.
			b.	20% of 528 named automobile as the one product that gave him (her) the most trouble in the last year. This proportion was the largest among the 41 names products.
Robinson (no date)	1976	U.S.A.		Automobile was the number 1 complaint category at the Office of Consumer Affairs.
	1976	U.S.A.		Automobile was number 1 in complaints volume at the Better Business Bureau.
	1976	U.S.A.		Automobile was the least satisfactory consumer product in a Louis Harris and Associates Poll.
	1975	U.S.A.		46% of new car purchasers had a problem.
Ash (1978)	Fall 1976	Bloomington, Indiana	a.	32% of the 30.2% of 119 respondents who purchased a new car were somewhat or quite dissatisfied. This proportion was 3rd highest among 11 cars and other transportation durables and 5th highest among 54 durables.

Reference	Year	Location	Result
Graine, McElvoy and King (1979)	February 1976	Continental U.S.A.	32% of 2513 interviewed households had a consumer problem. The automobile industry was 1st among 8 industries in which the products or services were subject to the most consumer problems.
Ash (1980)	Spring, 1979	Canada	a. 22% of 30% of 1030 new car purchasers were somewhat or very dissatisfied. This proportion was 2nd highest among 13 car and other transportation items, 2nd highest among 72 durables, and 14th highest among 225 products and services.
Arnold (1982)	Spring 1979	Canada	a. 28% of 138 who identified a most unsatisfactory experience identified the new car purchase. This proportion was the largest among 13 car and other transportation items.
			b. 12% of 307 new car purchasers identified this purchase as the most unsatisfactory experience. This proportion was the largest among 13 car and other transportation items, 5th highest among 72 durables, 7th highest among 225 products and services.
Moyer (1981)	1978, 1980	Ontario	a. On a scale of 1=very poor to 7=excellent regarding "The Kind of Job Industries Do", "New Car Dealers" ranked 10/19 (average rating = 4.2) and "Auto Manufacturers" ranked 16/19 (average rating=3.6).

Source: See Ralph M. Gaedeke, "Filing and Disposition of Consumer Complaints: Some Empirical Evidence," Journal of Consumer Affairs, (Summer, 1972), pp. 45-56; Ralph L. Day and E. Laird Landon, Jr., "Survey Data on Consumer Complaints for Consumer Protection Policy Makers," in Proceedings, Mid-West AIDS Conference, (1975), pp. 40-44; William R. Thomas and F. Kelly Shuptrine, "The Consumer Complaint Process: Communication and Resolution," Business and Economic Review, 21 (June, 1975), pp. 13-22; Larry M. Robinson, "A Model of Consumer Complaint Behavior: A Study of Complaint Behavior of New Car Owners," unpublished paper, Georgia State University, no date; Stephen B. Ash, "A Comprehensive Study of Consumer Satisfaction with Durable Products," in Advances in Consumer Research, Vol. V, ed. H. Keith Hunt (Ann Arbor, Michigan: Association for Consumer Research, 1978), pp. 254-262; Marc A. Grainer, Kathleen A. McElvoy and Donald W. King, "Consumer Problems and Complaints: A National View," in Advances in Consumer Research, Vol. VI, ed. William L. Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 494-500; Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Directions for Action," (Ottawa: Consumer and Corporate Affairs Canada, May, 1980); and Mel S. Moyer, "A Survey of Consumer Issues Among the People of Ontario," (Toronto: Ministry of Consumer and Commercial Relations, ISBN 0-7743-6480-7, October, 1981). Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analyses of the CSD Data Base" (Kingston: School of Business, Queen's University, February 1982).

Table 3.8
Consumer Reports 1979 New Car Incidence of Complaints

	Incidence of Complaints						
Manufacturer	Much Better Than Average	Better Than Average	Average	Worse Than Average	Much Worse Than Average	Total	Number of New Car Models
North American	0%	20%	47%	15%	18%	100%	55
Imports	90	10	0	0	0	100%	19

Source: Adapted from N.B. MacDonald, "The Future of the Canadian Automobile Industry in the Context of the North American Industry," (Working Paper No. 2, Corporation House Ltd., November, 1980), p. 17, in turn based on Consumer Reports, April, 1980, pp. 263-272.

Table 3.9

Consumer Reports 1980 New Car Trouble Index

	Index						
Manufacturer	Much Better Than Average	Better Than Average	Average	Worse Than Average	Much Worse Than Average	Total	Number of Rated New Car Models
North American							
American Motors	0%	0%	0%	33%	67%	100%	3
Chrysler	22	33	33	0	11	100%	9
Ford	6	0	38	44	13	100%	16
General Motors	0	2	39	18	41	100%	44
Total North American	4%	6%	36%	22%	32%	100%	72
Japanese							
Datsun	80%	20%	0%	0%	0%	100%	5
Honda	100	0	0	0	0	100%	4
Mazda	100	0	0	0	0	100%	3
Subaru	100	0	0	0	0	100%	1
Toyota	100	0	0	0	0	100%	5
Total Japanese	94%	6%	0%	0%	0%	100%	18
European							
Audi	100%	0%	0	0%	0%	100%	3
BMW	100	0	0	0	0	100%	1
Mercedes-Benz	100	0	0	0	0	100%	2
Renault	100	0	0	0	0	100%	1
Saab	0	100	0	0	0	100%	1
Volkswagen	40	40	20	0	0	100%	5
Volvo	100	0	0	0	0	100%	2
Total European	73%	20%	7%	0%	0%	100%	15
Total Import	85%	12%	3%	0%	0%	100%	33

Source: Consumer Reports, April 1981, pp. 226-235. "Trouble Index" for 1980 models; excluding trucks and vans.

through "provincial consumer magazines, random mailings, newspaper ads, by public press release, and .....club magazines."[35] Results based only on the 1,439 respondents who reported on 1980 model cars are presented in Table 3.10. A total of 33% of 33 North American models were rated "Much Worse than Average" or "Worse than Average" on "General Appraisal". The equivalent result for 12 import models was 8%.

A final Canadian result comes from another convenience sample, this time conducted by the Quebec Automobile Club using a questionnaire published in the November, 1979 issue of Protect Yourself.[36] Results based on only the 1979 models are found in Table 3.11. In this survey, 22% of 35 North American models were rated as "Much Worse than Average" or "Worse than Average." The equivalent result for 4 imported models was 0%. When the results of these four, independent, convenience samples are summarized, the results are as follows:

Survey	Proportion of Models rated "Much Worse than Average" or "Worse than Average"			
	North American		Imported	
	Proportion	Total Models	Proportion	Total Models
Consumer Reports 1979 models	33%	55	0%	19
Consumer Reports 1980 models	54	72	0%	33
QAC 1979 models	22	35	0%	4
CAA 1980 models	33	33	8%	12

Table 3.10

Canadian Automobile Association 1980 Car General Appraisal

	General Appraisal						
Manufacturer	Much Better Than Average	Better Than Average	Average	Worse Than Average	Much Worse Than Average	Total	Number of Rated New Car Models
North American							
American Motors	50%	50%	0%	0%	0%	100%	2
Chrysler	0	0	67	11	22	100%	9
Ford	40	0	40	20	0	100%	5
General Motors	0	24	35	35	6	100%	17
Total North American	9%	15%	42%	24%	9%	100%	33
Japanese							
Honda	50%	50%	0	0	0	100%	2
Mazda	100	0	0	0	0	100%	2
Toyota	67	33	0	0	0	100%	3
Total Japanese	71%	29%	0%	0%	0%	100%	7
European							
Lada	0%	0%	0%	0%	100%	100%	1
Renault	100	0	0	0	0	100%	1
Volkswagen	0	100	0	0	0	100%	2
Volvo	0	100	0	0	0	100%	1
Total European	20%	60%	0%	0%	0%	100%	5
Total Import	50%	42%	0%	0%	8%	100%	12

Source: Canadian Automobile Association, "Used Car Buyer's Guide," 1981, pp. 29-53, 1980 passenger cars only.

Table 3-11

Quebec Automobile Club 1979 Car General Appraisal

General Appraisal

Manufacturer	Much Better Than Average	Better Than Average	Average	Worse Than Average	Much Worse Than Average	Total	Number of Rated New Car Models
North American							
American Motors	0%	0%	0%	0%	100%	100%	1
Chrysler	0	0	60	40	0	100%	5
Ford	0	18	64	9	9	100%	11
General Motors	6	39	38	17	0	100%	18
Total North American	3%	26%	49%	17%	5%	100%	35
Total Imported	50%	0	50%	0%	0%	100%	4

Source: Monique B. Tardif, "The Experience of 6,000 Quebecers with Their Cars," Protect Yourself, October, 1980, pp. 5-12, 1979 passenger cars only.

The implications of these results seem clear: new car dissatisfaction lies with the product of the North American manufacturers.

3.6.3 Profile of the Dissatisfied New Car Purchaser

The question addressed in this section is whether or not the dissatisfied customer differs from all new car purchasers. One relevant study of Bloomington, Indiana residents by Ash revealed statistically significant positive correlations between degree of satisfaction and income, education and number of residents.[37] Significant results with respect to sex, marital status, employed, and own/rent home were also presented although the nature of the relationship could not be determined in an examination of Ash's paper.

A reanalysis of the data from Ash's 1979 survey of Canadian consumers revealed that the level of satisfaction of new car purchasers, with one exception, was not related to any of 15 demographic or socio-economic factors, participation in 12 leisure activities, readership of 8 kinds of magazines, or membership in 7 types of organized groups.[38] The exception occurred among those who belonged to political groups who exhibited greater dissatisfaction than those who didn't belong.

Among the 138 respondents in the same study who identified a most unsatisfactory purchase experience in the past three years among cars and other transportation items, 28% cited the new car purchase. Compared to those who identified some other purchase experience as the most unsatisfactory, these respondents tended more to:

1. Live in Ontario and be less likely to live in the Atlantic Provinces, and
2. Be 45 years of age or over.

They could not be further distinguished in terms of the other measures taken in the survey.

Among the 307 respondents who purchased a new car in the past three years, 12% also identified it as the most unsatisfactory experience in the same period of time. These unsatisfied new car purchasers when compared to other new car purchasers, tended more to:

1. Live in Western Canada and be less likely to live in the Atlantic provinces,
2. Be a male,
3. Live in a one-person household, and
4. Be the main wage earner in the household.

They could not be further distinguished from other new car purchasers.

The only tentative conclusion that can be drawn from the inconsistent results of these two studies is that the dissatisfied new car purchaser cannot be distinguished from all purchasers.

3.7 Complaining Behaviour Following the New Car Purchase

The final element of the model recognizes that the consumer may exhibit complaining behaviour depending upon the degree of dissatisfaction. Following Day, the complaining behaviour may take some form of public action such as seeking redress directly from the dealership or manufacturer, taking legal action, or complaining to business, private or government agencies.[39] The consumer could also take some sort of private action such as deciding not to buy an automobile or a particular brand of automobile, boycotting the dealer or warning friends about the car or the dealer. Day later proposed that whether or not the consumer engaged in complaining behaviour could be predicted on the basis of a cost/benefit analysis of complaining as well as a psychological motivation to complain.[40] Personality as an explanatory variable in understanding complaint action was also advocated by Robinson and Adler.[41]

3.7.1 Complaint Actions

The results of reanalyzing the Ash data base as to complaint behaviour are summarized in Table 3.12. These results suggest that only 1 of 3 very or somewhat dissatisfied purchasers, or 1 of 2 new car purchasers who said the new car purchase was the most dissatisfactory experience, took action. Personal actions centered on a refusal to ever again buy the brand and/or to warn

Table 3.12

Dissatisfaction And Complaining Behaviour Among New Car Purchasers And Dissatisfied Purchasers

	New Car Purchasers	Somewhat or Very Dissatisfied New Car Purchasers	New Car Purchasers Who Said New Car Purchase Was The Most Dissatisfactory Experienc
	(n=307)	(n=68)	(n=37)
New Car Purchasers	100%		
Somewhat or Very Dissatisfied New Car Purchasers	22	100%	
New Car Purchasers Who Said New Car Purchase Was The Most Dissatisfactory Experience	12	54	100%
Dissatisfied New Car Purchasers Who Took Action[1]	7	32	59
Personal Actions			
Decided not to buy that brand again	4	19	35
Warned family and friends	3	15	27
Decided to stop shopping at Store (dealer) where I bought the product	2	9	16
Decided to quit using that product	2	7	14
Other personal actions	< 1	1	3
Direct Actions			
Contacted store (dealer)	4	19	35
Contacted manufacturer	4	16	30
Returned product for replacement or refund	1	6	11
Contacted manufacturer's association	1	4	8
Contacted governmental agency/public official	1	3	5
Contacted Better Business Bureau	< 1	1	3
Took legal action	< 1	1	3
Other direct actions	< 1	1	3

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[1] Actions taken proportions do not add to 100% because of multiple mentions

Source: Arnold, "Correlates of New Car Purchase."

family and friends. Direct actions were mostly concerned with contacting the dealer or manufacturer to complain.

These data reveal the small proportions of purchasers who actually complain. The results indicate that dealers and manufacturers are hearing from only 1 in 5 somewhat or very dissatisfied new car purchasers and only 1 in 3 new car purchasers who identified their car purchase as the most dissatisfactory purchase experience. When these proportions are recalculated on the base of all new car purchasers, they show that even though 22% or nearly 1 in 4 new car purchasers were somewhat or very dissatisfied, the dealer or manufacturer heard from only 4% or 1 in 25. This suggests that a dealer or manufacturer using complaints among all purchasers as a measure of customer satisfaction be aware of the limitations of this measure.

The proportions of dissatisfied new car purchasers who complained to governmental agencies, consumer organizations, or Better Business Bureaus, are even smaller. The results suggest that less than 1 in 25 very or somewhat dissatisfied purchasers are complaining to these organizations.

These recent Canadian results are consistent with the results of other studies not limited to automobiles, but including this type of product. In a 1972 national probability sample of U.S. households, the reaction to consumer mistreatment (any marketplace experience) was as follows:[42]

Consumer Segment	Proportion (n=1215)
All consumers	100%
Reported being mistreated	35
Reported being mistreated and did something	24

Of all actions taken, 32% of the respondents complained to the store manager, salesman, clerk, or president of the corporation, 25% did nothing, while 8% wrote a letter to the store, manufacturer, or company involved. Again, independent organizations received only a small proportion of the actions (3%).

A study by Andreasen of 2400 households in 34 U.S. cities also showed similar results: [43]

Category	Proportion
All products and services	100%
Products and services with problems	20
Problems reported to business	8

Andreasen also said that "less than 1 percent of the voiced complaints ever went to any sort of government, Better Business Bureau, or official complaint handling system" (p.9).

3.7.2 Complainer Profile

In Section 3.6.3, it was concluded that the dissatisfied purchaser could not be distinguished from all new car purchasers. In Section 3.7.1, however, it was shown that complaining

Table 3.13
Characteristics of Complainers

Reference	Sample	Education	Income	Age
Thomas and Shuptrine (1975)	Columbia, S.C. quota sample	College Degree	No Difference	No Difference
Warland, Hermann and Willits (1975)	U. S. National sample	Better Educated	Higher Incomes	Younger
Liefeld, Edgecomb and Wolfe (1975)	Complaint letter writers to Canadian governments & agencies	Higher	More than $8000 Family Income	25-54
Bernacchi, Kono and Smith (1979)	Complainers to Wayne County Consumer Protection Agency	Better Educated	Earned More Income	Younger
Gronhaug and Zaltman (1981)	Market Facts U.S. Consumer Mail Panel	Higher	Higher	Younger

Source: For the complainers studies, see M.D. Bernacchi, Ken Kono, and Jack E. Smith, "The Satisfaction of Consumer Complainers with Consumer Protection Agencies", in New Dimensions of Consumer Satisfaction and Complaining Behavior, eds. Ralph L. Day and H. Keith Hunt (Division of Research, School of Business, Indiana University, 1979), pp. 83-85; Steven L. Diamond, Scott Ward, and Ronald Faber, "Consumer Problems and Consumerism: Analysis of Calls to a Consumer Hot Line", Journal of Marketing, 40 (January, 1976), pp. 58-62; Kjell Gronhaug and Gerald Zaltman, "Complainers and Noncomplainers Revisited: Another Look At The Data", in Advances in Consumer Research Volume VIII, ed. Kent B. Monroe (Ann Arbor, Michigan: Association for Consumer Research, 1981), pp. 83-87; J.P. Liefield, F.H.C. Edgecombe and Linda Wolfe, "Demographic Characteristics Canadian Consumer Complainers," Journal of Consumer Affairs, 9 (Summer, 1975), pp. 73-80; William R. Thomas and F. Kelly Shuptrine, "The Consumer Complaint Process: Communication and Resolution", Business and Economic Review, 21 (June, 1975), pp. 13-22; Rex H. Warland, Robert O. Hermann, and Jane Willits, "Dissatisfied Consumers: Who Gets Upset and Who Takes Action", Journal of Consumer Affairs, (Winter, 1975), pp. 148-163.

consumers represented only a minority of all dissatisfied consumers. This raises the question as to whether complainers are different from other purchasers.

No one study could be identified which profiled the complainers among new car purchasers. As revealed in the previous section, new car complainers are a small proportion of any sample drawn from the general population which makes rigorous, statistical comparisons difficult, even among large samples.

Several studies, however, profiled purchasers who complained about products including automobiles.[44] As summarized in Table 3.13, these studies consistently indicated that the complainer, compared to the noncomplainer, is better educated, has higher income, and is younger. Several other characteristics among these studies suggested the complainer also has a higher occupation and social class status, and has more liberal, activist attitudes regarding business and government.

3.8 Conclusions

The new car purchase is a significant source of consumer complaints. In 9 U.S. and 3 Canadian studies conducted during the 1970-1980 period, it was found that the new car purchase or auto industry ranked first or near first among products, services and/or industries in terms of consumer dissatisfaction or complaint levels (Section 3.6.1).

Complainers heard from by manufacturers represent only a small portion of dissatisfied new car purchasers. On the basis of approximately twelve U.S. and Canadian studies, it was estimated that out of 100 new car purchasers,

30 to 50 experienced a problem. Of these purchasers,

20 to 30 were dissatisfied. Of these purchasers,

10 to 20 were extremely dissatisfied. Of these purchasers,

5 to 10 took action. Of these purchasers,

2 to 5 complained to the manufacturer. (Sections 3.6.1 and 3.7.1).

Consumers are not as satisfied with the automobiles manufactured by North American companies as they are with the import vehicles.

. Only 1 in 4 Dayton, Ohio households in a 1981 survey identified American subcompacts as either "most reliable" or "best overall" (Section 3.3).

. Only 1 in 2 Manitoba, Ontario or Quebec owners of North American cars were satisfied with the reliability of their cars. In contrast, 2 out of 3 owners of import cars were satisfied (Section 3.5).

. Between 1 in 4 and 1 in 2 North American 1979 and 1980 new car models were rated "Worse than Average" or "Much Worse than Average" in four independent U.S., Canadian and Quebec studies. Less than 1 in 12 import models were in the same category (Section 3.6.2).

A major reason for consumer dissatisfaction and complaints is the perceived lack of quality in the materials and workmanship of the new car.

. A study of 1979 and 1980 B.C., Manitoba, Ontario and Nova Scotia purchasers of 4 different car sizes revealed "Quality of materials" and "Quality of workmanship" to be in the bottom half of attributes ranked by the mean level of expectations (Section 3.3).

. In 4 of 6 recent Canadian criminal and civil cases resulting in judgements for the purchaser, the defect related to the manufacture of the car (Section 3.4.1).

. In two late 1970's U.S. and Canadian studies, 1 in 2 most dissatisfied purchasers of cars and other transportation items identified "inferior quality of materials" or "inferior quality of workmanship" as reasons for their dissatisfaction (Section 3.5.1).

A second major source of consumer dissatisfaction and complaints is the new car warranty.

. In 2 of 6 recent Canadian civil cases resulting in judgements for the purchaser, it was revealed that new car deficiencies were not corrected during the warranty period (Section 3.4.2).

. In two late 1970's U.S. and Canadian studies, between 1 in 3 and 1 in 2 most dissatisfied purchasers of cars and other transportation items identified an aspect of the warranty as a reason for their dissatisfaction (Section 3.5.2).

- Authors of a study of Wisconsin new car purchasers extrapolated their results to the U.S. population and estimated there were 1 1/2 million purchasers from the 1977 model year who had unresolved warranty problems (Section 3.5.2).
- Automobiles ranked 1st among 5 products that accounted for most warranty and/or guarantee complaints among 32 State agencies and 15 voluntary organizations in a 1972 U.S. study (Section 3.6.1).

A third major source of consumer dissatisfaction and complaints is dealer service and "comeback".

- A 1971 study of Ontario new car owners revealed that 1 in 2 respondents who had a defect had to return more than once to get the car repaired (Section 3.5.2).
- A 1977 study of Wisconsin State new car purchasers revealed 1 in 4 had delays getting the most important trouble fixed, and 1 in 6 were left with an unresolved problem one year after purchase (Section 3.5.2).
- In two late 1970's U.S. and Candian studies, between 1 in 5 and 1 in 4 most dissatisfied new car purchasers of cars and/or transportation items felt that the dealer misrepresented his ability to provide parts and service (Section 3.5.4).

The dissatisfied new car purchaser cannot be consistently distinguished from other purchasers. The dissatisfied consumer who complains, however, is younger, better educated, and has a higher income.

. In a 1979 study of Canadian new car purchasers, dissatisfied purchasers could not be distinguished in terms of a wide variety of demographic and socio-economic factors, participation in leisure activities, readership of magazines, or memberships in organized groups (Section 3.6.3).

. In a review of 1 Canadian and 4 U.S. studies, it was found that complainers were younger, better educated, and had higher incomes (Section 3.7.2).

Footnotes

[1] A recent overview is provided by Richard L. Oliver, "Theoretical Bases of Consumer Satisfaction Research: Review, Critique and Future Direction," in Theoretical Developments in Marketing, eds., Charles W. Lamb, Jr. and Patrick M. Dunne (Chicago, Illinois: American Marketing Association, 1980), pp. 206-210. Additional perspectives on the conceptualization of consumer satisfaction are provided in H. Keith Hunt, "CS/D--Overview and Future Directions," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, ed., H. Keith Hunt (Cambridge, Mass.: Marketing Science Institute, 1977), pp. 455-488 and Folke Olander, "Consumer Satisfaction - A Skeptic's View," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, ed. H. Keith Hunt (Cambridge, Mass.: Marketing Science Institute, 1977), pp. 409-452.

[2] Ralph L. Day, "Toward a Process Model of Consumer Satisfaction," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, ed. H. Keith Hunt (Cambridge, Mass.: Marketing Science Institute, 1977), pp. 153-183 and Mary C. Gilly, "Complaining Consumers: Their Satisfaction With Organizational Response," in New Dimensions of Consumer Satisfaction and Complaining Behaviour, eds. Ralph L. Day and

H. Keith Hunt (Bloomington, Indiana Division of Research, School of Business, Indiana University, 1979), pp. 99-102.

[3] Day, "Toward a Process Model."

[4] Automotive News, "Japanese Subcompacts Seen Better," July 20, 1981, p. 42.

[5] Peter C. Thirkell, "Consumer Expectations Disconfirmation and Satisfaction" (Ph.D. dissertation, The University of Western Ontario, 1980).

[6] John R. Kennedy and Peter C. Thirkell, "The Effect of Automobile Product Experience on Attribute Disconfirmation and Importance," in Proceedings of the Fifth Conference on Consumer Satisfaction, Dissatisfaction and Complaining Behaviour (in press).

[7] Olander, "Consumer Satisfaction."

[8] See Whittaker v. Ford Motor Company of Canada Ltd. et al.; Ford Motor Company of Canada Ltd., Third Party, 24 O.R. (2nd), 344. Thauberger v. Simon Fraser Sales Ltd., Mazda Motors of Canada Ltd. and Toyo Kogyo Co. Ltd., 3 B.C.L.R., 193.

[9] See Regina V. Ford Motor Company of Canada Limited, 49 C.C.C. (2d), 1; Wojakowski v. Pembina Dodge Chrysler Ltd. [1976], 5 W.W.R., 97.

[10] Phil Edmonston, Lemon-Aid (Don Mills, Ontario: Musson Book Company, 1980), pp. 102-107.

[11] Mark Dowie, "How Ford Put 200 Million Fire Traps on Wheels," Business and Society Review, 23 (Fall, 1977), pp. 46-55.

[12] Ralph Nader, Unsafe At Any Speed; The Designed-In Dangers of the American Automobile (New York: Grossman Publishers, 1965), pp. 3-21.

[13] See Burridge v. City Motors (Nfld.) Ltd., 10 Nfld. & P.E.I.R., 451; General Motors v. Kravitz, (1979) 1 S.C.R., 790.

[14] Edmonston, Lemon-Aid, p. 107.

[15] N.B. MacDonald, The Future of the Canadian Automobile Industry in the Context of the North American Industry (Corporation House Ltd., Working Paper No. 2, November, 1980), p. 21.

[16] Richard W. Olshavsky and John A. Miller, "Consumer Expectations, Product Performance, and Perceived Product Quality," Journal of Marketing Research, 9 (February, 1972), pp. 19-21.

[17] Day, "Toward a Process Model."

[18] For the U.S. study, see Ralph L. Day and Stephen B. Ash, "Consumer Response to Dissatisfaction with Durable Products," in Advances in Consumer Research, Vol. VI, ed. William Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 434-444. For the Canadian study, see Stephen B. Ash, Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Direction for Action (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer & Corporate Affairs Canada, May, 1980) and Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behviour," Volume 2, Research

Findings, Durable Products Survey (London: The University of Western Ontario, November, 1979). For new cars, see Stephen J. Arnold, "Correlates of New Car Purchase: Additional Analysis of the CSD Data Base" (Kingston: School of Business, Queen's University, February, 1982).

[19] Ibid.

[20] Ibid.

[21] The study was by Len Coates, a syndicated car columnist, and was cited in Edmonston, Lemon-Aid, p. 483.

[22] Day and Ash, "Consumer Response" and Ash, Consumer Satisfaction.

[23] Kenneth McNeil and Richard E. Miller, "The Profitability of Consumer Protection: Warranty Policy in the Auto Industry," Administrative Science Quarterly, 25 (September, 1980), pp. 407-427.

[24] Louis J. Romero, "Automobile Warranties in North America with Special Reference to the Ontario Situation" (Master of Laws Thesis, Osgoode Hall Law School, York University, September, 1972).

[25] Ralph M. Gaedeke, "Filing and Disposition of Consumer Complaints: Some Empirical Evidence," Journal of Consumer Affairs, (Summer, 1972), pp. 45-56.

[26] Lee Richardson and David N. Fogg, "Service Patronage Patterns in New Product Warranties: A Pilot Study of Automobiles," Southern Journal of Business, 216 (July, 1970),

213-217.

[27] Reported by Roger Rowand, "Improve It or Lose It, Industry Told," Automotive News, March 2, 1981, pp. 2, 46.

[28] John Everet Swan and Douglas S. Longman, "Consumer Satisfaction With Automobile Repair Performance: Attitudes Towards the Industry in Governmental Control," in Combined Proceedings, eds. Boris W. Becker and Helmut Becker (Chicago, Illinois: American Marketing Association, 1973), pp. 249-55.

[29] See for example Day, "Toward a Process Model." , Jack L. Engledow, "Was Consumer Satisfaction a Pig in a Poke?" Business Horizons (April, 1977), pp. 87-94; Richard L. Oliver, "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," Journal of Marketing Research, 17 (November, 1980), pp. 460-469; and John E. Swan and Linda Jones Combs, "Product Performance and Consumer Satisfaction: A New Concept," Journal of Marketing 40 (April, 1976), pp. 25-33; Ralph E. Anderson, "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance," Journal of Marketing Research 9 (February, 1973), pp. 38-44; and Richard N. Cardozo, "An Experimental Study of Consumer Effort, Expectation, and Satisfaction," Journal of Marketing Research 2 (August, 1965), pp. 244-249.

[30] Swan and Combs, "Product Performance and Consumer Satisfaction."

[31] Robert A. Westbrook, "Intrapersonal Affective Influences on

Consumer Satisfaction With Products," Journal of Consumer Research, 7 (June, 1980), pp. 49-54.

[32] See Ralph M. Gaedeke, "Filing and Disposition of Consumer Complaints: Some Empirical Evidence," Journal of Consumer Affairs, (Summer, 1972), pp. 45-56; Ralph L. Day and E. Laird Landon, Jr., "Survey Data on Consumer Complaints for Consumer Protection Policy Makers," in Proceedings, Mid-West AIDS Conference, (1975), pp. 40-44; William R. Thomas and F. Kelly Shuptrine, "The Consumer Complaint Process: Communication and Resolution," Business and Economic Review, 21 (June, 1975), pp. 13-22; Larry M. Robinson, "A Model of Consumer Complaint Behavior: A Study of Complaint Behavior of New Car Owners," unpublished paper, Georgia State University, no date; Stephen B. Ash, "A Comprehensive Study of Consumer Satisfaction with Durable Products," in Advances in Consumer Research, Vol. V, ed. H. Keith Hunt (Ann Arbor, Michigan: Association for Consumer Research, 1978), pp. 254-262; Marc A. Grainer, Kathleen A. McElvoy and Donald W. King, "Consumer Problems and Complaints: A National View," in Advances in Consumer Research, Vol. VI, ed. William L. Wilkie (Ann Arbor, Michigan: Association for Consumer Research, 1979), pp. 494-500; Stephen B. Ash, "Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Directions for Action," (Ottawa: Consumer and Corporate Affairs Canada, May, 1980); and Mel S. Moyer, "A Survey of Consumer Issues Among the People of Ontario," (Toronto:

Ministry of Consumer and Commercial Relations, ISBN 0-7743-6480-7, October, 1981).

[33] N.B. MacDonald, "The Future of the Canadian Automobile Industry in the Context of the North American Industry," (Working Paper No. 2, Corporation House Ltd., November, 1980), p. 16.

[34] Consumer Reports, April, 1981, pp. 226-235.

[35] Canadian Automobile Association, "Used Car Buyer's Guide," 1981.

[36] Monique B. Tardif, "The Experience of 6,000 Quebecers with Their Cars," Protect Yourself, October, 1980, pp. 5-12.

[37] Ash, "A Comprehensive Study."

[38] Arnold, "Correlates of New Car Purchase."

[39] Day, "Toward a Process Model." Another model with explicit attention paid to complaint behaviour is provided in Mary C. Gilly, "Complaining Consumers: Their Satisfaction With Organizational Response," in New Dimensions of Consumer Satisfaction and Complaining Behaviour, eds. Ralph L. Day and H. Keith Hunt (Bloomington, Indiana: Division of Research, School of Business, Indiana University, 1979), pp. 99-102.

[40] Ralph L. Day, "Research Perspectives on Consumer Complaining Behaviour," in Theoretical Developments in Marketing, eds. Charles W. Lamb, Jr. and Patrick M. Dunne, (Chicago: American Marketing Association, 1980), pp. 211-215.

[41] Larry M. Robinson and Roy D. Adler, "Personality as An Explanatory Variable for Complaint Action of Automobile Buyers,"

in Proceedings of the Division 23 Program: 87th Annual Convention of the American Psychological Association, ed. Ivan Ross (1979), pp. 90-93.

[42] Rex H. Warland, Robert O. Herrman and June Willits, "Dissatisfied Consumers: Who Gets Upset and Who Takes Action," Journal of Consumer Affairs (Winter, 1975), pp. 148-163.

[43] "Andreasen Reports Only 25 Percent of Problems Consumers See Are Satisfactorily Resolved," Marketing News, July 16, 1976, p. 9. See also A. Best and A.R. Andreasen, Talking Back to Business: Voiced and Unvoiced Consumer Complaints (Washington, D.C.: Center for Study of Responsive Law, 1976).

[44] For the complainers studies, see M.D. Bernacchi, Ken Kono, and Jack E. Smith, "The Satisfaction of Consumer Complainers with Consumer Protection Agencies", in New Dimensions of Consumer Satisfaction and Complaining Behavior, eds. Ralph L. Day and H. Keith Hunt (Division of Research, School of Business, Indiana University, 1979), pp. 83-85; Steven L. Diamond, Scott Ward, and Ronald Faber, "Consumer Problems and Consumerism: Analysis of Calls to a Consumer Hot Line", Journal of Marketing, 40 (January, 1976), pp. 58-62; Kjell Gronhaug and Gerald Zaltman, "Complainers and Noncomplainers Revisited: Another Look At The Data", in Advances in Consumer Research Volume VIII, ed. Kent B. Monroe (Ann Arbor, Michigan: Association for Consumer Research, 1981), pp. 83-87; J.P. Liefield, F.H.C. Edgecombe and Linda Wolfe, "Demographic Characteristics Canadian Consumer Complainers,"

Journal of Consumer Affairs, 9 (Summer, 1975), pp. 73-80; William R. Thomas and F. Kelly Shuptrine, "The Consumer Complaint Process: Communication and Resolution", *Business and Economic Review*, 21 (June, 1975), pp. 13-22; Rex H. Warland, Robert O. Hermann, and Jane Willits, "Dissatisfied Consumers: Who Gets Upset and Who Takes Action", *Journal of Consumer Affairs*, (Winter, 1975), pp. 148-163.

Chapter 4

THE CANADIAN AUTOMOBILE INDUSTRY

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4.1 Introduction

As revealed in earlier Chapters of this report, there are several facets of the new automobile purchase about which consumers express dissatisfaction. For example, consumers exhibit concerns about workmanship quality. Consumers have also been unhappy with the way in which manufacturers and dealers respond to warranty clauses.

Although it is possible to determine why consumers are dissatisfied with the new automobile purchase, there can be no responsible public or private sector response until it is understood why the problems have arisen. It will be argued in this Chapter that several problems can be directly attributed to the way in which the industry functions. Thus, the objective of this Chapter is to identify features of the Canadian or North American automobile industry which might explain new car purchase dissatisfaction.

Additional characteristics of the automobile industry which help explain consumer dissatisfaction can be identified by examining in some detail the Japanese automobile manufacturers. Japanese cars have made dramatic gains in North America since their introduction to Canada and the U.S. in the 1960s. By May, 1981, for example, imported cars captured 28.4% of the Canadian market where 22.2% belonged to the four major Japanese auto makers. [1]

This chapter will not provide a comprehensive overview of the Canadian automobile industry as there already exist a number of relevent studies.[2] Topics discussed in these studies include: the background of the automobile industry, the structure of the industry, the Canada-United States automotive agreement, Canada's participation in the North American automobile industry, research and development in the automobile industry, and the future of the Canadian automobile industry.

This chapter begins by establishing the Canadian automobile industry as an interdependent unit in the total North American automobile industry. Then, the characteristics of the North American automobile industry which seem to help explain consumer dissatisfaction are reviewed.

4.2 The Canadian Automobile Industry as an Interdependent Unit in the North American Automobile Industry

As more fully documented in Reisman, the Canadian automobile industry is not an entity unto itself.[3] Instead, it is an interdependent unit working with several other units in the total Canadian-U.S. automotive industrial complex. Partial evidence for this interdependent status is provided by the following:

The Canada/United States Automotive Products Agreement of 1965. Provided that certain conditions such as Canadian value-added content are met,[4] the Automotive Agreement essentially provides a free trade of automobile vehicles across the Canadian-U.S. border. As a consequence, only a portion of the automobile models sold in Canada are also produced in the same country. The U.S. automobile market absorbs 70% of Canadian vehicle production and 80% of Canada's independent part production. Conversely, 75% of Canadian demand for North American vehicle is satisfied from U.S. production.[5]

The Canadian production is in the form of assembly of selected models as directed by the corporate head office. For example, Chrysler Canada manufactures the Cordoba, Mirada and Imperial models.[6] Other models, such as the Omni, Horizon, Reliant and Aries are manufactured in the United States and imported into Canada under the terms of the Automotive Agreement.

Research and Development. Because it is only an interdependent unit in a larger operation, the Canadian automobile industry does not have a full range of automotive capabilities. Instead, the Canadian unit is mostly concerned with assembly operations and parts production while such activities as research and development occur in the U.S. For example, from 1973 to 1977, the annual amount spent on research and development in Canada increased from only $8.0 to $8.5 million.[7] In comparison, the U.S. automobile industry spent an estimated $3.4 billion on research and development in 1977, an increase of about 15% over the previous year. The Canadian subsidiaries contributed $251 to $335 million annually to the research and development accounts of the parent U.S. corporations over the years 1973 to 1975.[8] Such differences are expected to remain and perhaps grow as the North American automobile manufacturers move closer to the "world car" concept.

Control. The Canadian automobile industry is primarily U.S. owned and controlled.[9] For example, the President of General Motors of Canada Limited reports to the Executive Vice President in charge of the Overseas and Canadian group.[10] Similarly, the U.S. parent company makes investment decisions on behalf of the subsidiaries, in addition to handling such functions as purchasing and labour relations.[11]

Implications. There are several implications of recognizing the interdependent status of the Canadian automobile industry. One implication is that developments in the Canadian automobile industry are subject to developments in the U.S. These developments would not only include the consequences of decisions made by the parent U.S. corporations but would also include changes in the U.S. economy and U.S. government regulations.

A second implication is that patterns of consumer dissatisfaction in Canada are likely to mirror those in the U.S. An identical product and a similar distribution system should lead to similar problems, where they may exist, in the two countries. Thus, U.S.-based studies of consumer satisfaction/dissatisfaction should also be applicable to Canada, a hypothesis that was supported by the similarity of satisfaction and complaint statistics reviewed in Chapter 3.

Another consequence of similar dissatisfaction patterns is that U.S.-originated public policy options may also be applicable to Canada. Thus, a rich U.S. literature on this topic becomes applicable and will be considered in Chapter 5.

It is recognized that certain differences between the countries such as climate may cause some differences in consumer problems. However, if such problems exist, the ability to respond may be limited. There are obvious economies of scale in manufacturing automobiles for the entire North American market, as is recognized by the existence of the Automotive Agreement, and any Canadian-only modifications may incur costs that outweigh the potential consumer benefits. On the other hand, the auto industry has always been able to install a wide variety of options on each car, and a Canadian option package would seem quite possible. This would seem particularly important in order to deal with the problems caused by snow, ice and salt. Reisman has outlined several methods for encouraging the research and development activities in this country necessary to respond to unique Canadian concerns.[12]

The final implication of the interdependence of the Canadian automobile industry within the North American industry concerns public policy alternatives for reducing consumer dissatisfaction. Public policy initiatives must recognize that decisions by the manufacturers are being made for the North American and even world markets, and it may be difficult for the Canadian subsidiaries to respond on their own. Indeed, MacDonald argued that public policy makers should negotiate directly with the U.S. corporate headquarters in order to effectively influence Canadian operations.[13]

4.3 Characteristics of the North American Automobile Industry as a Basis for Consumer Dissatisfaction

In the preceding section, it was established that the Canadian automobile industry acts as an interdependent unit within the total North American automobile industry. It is therefore possible to examine certain characteristics of, and developments, in the North American industry which help to explain dissatisfaction among Canadian consumers.

4.3.1 Profitability and Market Demand for Larger Cars

Consumer problems due to the unavailability of satisfactory North American subcompact and compact cars, at least until the past two or three years, can be partially attributed to the profitability of, and hence previous industry focus upon, larger cars.[14] Fixed investment in plant and machinery, advertising expenses, and labour costs are about the same for either a subcompact or standard-size car. Furthermore, raw materials vary in cost by no more than approximately $500.[15] Nonetheless, a standard or luxury-sized automobile can be sold for several thousand dollars more than a compact version. For example, in

1974-75, the difference in manufacturing a Chevrolet Caprice and a Cadillac DeVille was $300-$400, compared to a $3800 difference in the retail price. The subsequent difference in profits to General Motors was over $2000.[16]

Until very recently, the tendency for North American automobile manufacturers to produce large automobiles has not been without market support. Ford, for example, commited $800 million to a program which redesigned and revamped the corporation's big cars, especially those offered by the Lincoln-Mercury Division.[17] This investment subsequently paid off with record profits and sales in the early 1970's. It was almost overnight in the late 1970's and early 1980's when consumers then switched to the small car. This clearly presents difficulties to the manufacturer as it takes 3 to 5 years to move from the drawing board to showroom.

4.3.2 Annual Model Changes

As was documented in Chapter 3, there is evidence of consumer concern with a lack of quality in the materials and workmanship of North American built cars. A partial explanation for this phenomena may be found in the industry practice of annual model changes.

As is well known, a characteristic of the North American automobile industry is to offer each year a new version of a particular model. In addition, more models are offered each year. For example, at the end of the 1960 model year, there were 244 models offered by the automobile companies. Seven years later, there 370 models.[18]

Two alternative interpretations could explain the practice of frequent model changes and additions. One interpretation is that the industry is responding to a consumer need for change, as well as an increased desire for more alternatives. The alternative interpretation is that the frequent style changes and model proliferation act as an inducement for consumers to trade up to a new car before the physical life of the car is ended.[19]

Whatever the interpretation for frequent model changes and additions, there is one possible effect. Frequent styling changes may occur at the expense of significant engineering advances. Furthermore, the manufacturer may perceive less need to provide a long lasting, durable car. White, for example, indicated that of the Big Three North American automobiles which were nine years old on July 1st, 1955, 80.70% were still on the road.[20] Twelve years later, only 55.23% of nine-year old cars were still operative.

As suggested by various observers of the North American automobile industry, advances in automobile technology have been related more to the immediate need to produce annual styling changes.[21] Even in areas in which contemporary automobiles differ from early, post-war predecessors (e.g. automotive transmissions and power-assisted equipment), these observers argued that the basic technology was developed before the war, and that post-war developments represent achievements in refining the technology, rather than any fundamental change.[22]

It is acknowledged that there is not full agreement on this point by industry experts. In a 1982 Automotive News survey of domestic automotive engineers, the following results were obtained:[23]

Statement	True	False
In general, Japanese vehicle manufacturers surpass U.S. in technical innovation.	27%	73%
In general, Japanese vehicle manufacturers surpass the U.S. in product design expertise.	23	77

4.3.3 Tangible Versus Intangible Performance Measures

There is evidence within the automobile industry of emphasis upon short-term tangible measures of performance at the expense of performance indicators which are more long-term in nature. For example, Wright indicated that automobile divisions, from assembly plant to dealership operations, are treated as profit centres.[24] In addition, McNeil and Miller said that managerial performance is measured by a current profitability.[25] Finally, individual dealers are judged against their volume of new car sales and not, until recently, against the level of customer service and satisfaction.[26] Thus, each of these performance measures indicates an emphasis upon measurable short-term sales and profits. By implication, there would be less attention paid to the accumulation of intangible, consumer goodwill.

The accounting systems of the automobile industry have tended to emphasize the tangible, short-term measures of performance.[27] Such accounting systems can easily record numbers in terms of vehicles sold and quarterly profits. However, they do not record consumer goodwill which is consequently excluded from corporate financial statements.

This type of bias arising from the short-term accounting systems has been further described by Fox, Pate and Pondy.[28] These authors contended that short-term accounting systems, when applied to services, tend to monitor process rather than output. Thus, rewards were often tied to rigid adherence to such process items as cost-control rather than to ultimate service quality.

According to McNeil and Miller, the short-term accounting systems also means that decision-making will favour production over service goals.[29] The reason is that the principal criteria used by most manufacturers in setting priorities are the size of the division and the likelihood of quick profitability. Against these criteria, service divisions are relatively small and unprofitable. Thus, service divisions tend not to receive substantial resources.[30]

A similar bias holds at the dealer level. Sales results are immediate whereas a response to good service won't show up for years.

Another reason suggested for the emphasis on tangible as opposed to intangible performance indicators is the method of selecting top corporation executives.[31] Individuals chosen for such positions tend to be drawn from divisions handling massive amounts of capital (e.g. finance, assembly, etc.). This selection bias tends to prevent those with service backgrounds from reaching the highest levels of influence in the corporation. Similarly, at the dealer level, it is usually former sales managers as opposed to service managers who get dealerships.

This emphasis in the automobile industry upon tangible as opposed to intangible performance indicators again helps to explain consumer dissatisfaction. Consumer satisfaction with the new automobile purchase is an intangible consequence of performance which does not show up on the corporate balance sheet. As long as industry sales and profits are maintained, the automobile manufacturer does not sense any need to change. Sales remain at high levels because dissatisfied consumers are "ferried" from one domestic automobile manufacturer to another in a never-ending cycle.[32] It has only been since the foreign automobile manufacturers with a known, better product established credible dealer networks that the situation changed. Sales are no longer being ferried but instead lost to foreign manufacturers.

4.3.4 Financial Versus Marketing Emphasis

In the late 1950's, there was evidence of increased emphasis upon the financial aspects of the automobile business.[33] For example, there was a greater focus upon the ability of the automobile manufacturer to pay shareholders a consistent, annual dividend. As a consequence, short term profits were maximized at the expense of the periodic investments needed to ensure long term profitability.

Concurrent with the financial and internal emphasis was a relative lack of emphasis upon marketing and the external side of the business.[34] In other words, rather than being concerned with understanding and meeting consumer needs, the objective was to get the product out of the plant and out of the showroom. In marketing terminology, there was a "sales" orientation as opposed to a true "marketing" orientation. For example, a recent announcement described the appointment of the new General Marketing Manager at the Chevrolet Division of General Motors.[35] The significance of the announcement was that the General Marketing Manager would report directly to the General Manager of the Division, in contrast to the previous arrangement whereby the senior marketing person reported to the General Manager through the General Sales Manager. It also contrasted to the previous situation where "some auto industry observers believed Chevy salesmen ran the advertising and marketing."

In the Canadian context, it was not possible to find evidence among the domestic manufacturers of another indicator of a marketing orientation, a consistent marketing research program.[36] By marketing research, it is not simply meant surveys of recent purchasers or advertising tests, but instead periodic usage and attitude surveys of all automobile purchasers. The surveys would also not only measure overall brand intentions and preferences but also purchase criteria and ratings of each of the makes on each of the criteria.

Another indicator of a lack of a strong consumer orientation is found in a human factors study supervised by an industrial engineering professor at the University of Toronto.[37] "North American cars were woefully lacking. When people put on seatbelts they frequently couldn't reach all the controls. We found women who couldn't reach the ignition key or fully depress the brake pedal. Taller people lacked upward visibility through the windshield and shorter people lacked downward visibility." In contrast, Japanese car makers, lacking direct knowledge of North American body types and sizes, conducted extensive human factors research. The result was Japanese cars of sophisticated design that comfortably accommodated a wide range of drivers and "makes (which) were far and away the best".

This relative difference between North American and domestic manufacturers was emphasized in another study by Robert E. Cole of the University of Michigan.[38] He concluded that one of the reasons Japanese cars were better than their U.S. competitors in many respects was that U.S. management too often defined quality in its narrowest sense: as conformity to specifications rather than "fitness for use" as defined by the consumer. Conformity to specifications then becomes an end in itself, "the subject of dispute among different department and specialities within the industrial bureaucracy, and the final user is forgotten."

One reason that has been advanced for the lack of a true marketing orientation and isolation from the consumer is the large size of the North American car manufacturer organizations. MacDonald, for example, in a typical Galbraithian manner argued that bigness in the auto industry "defies mediocrity, manipulates the national economy, robotizes employees, (and) dictates to customers."[39]

Insiders acknowledge the problems of the bureaucracy in the automotive organizations. DeLorean described how he took over the large Chevrolet Division at General Motors and found it out of control.[40] Decision-making consequently took so long that decisions were implemented at the last minute resulting in poor products. He felt even more powerless when he reached the "14th Floor" of General Motors. There, he found an emphasis on day-to-day internal operations as opposed to what he thought should be long-term, external concerns.

Other insiders agree. In a 1982 Automotive News survey of domestic automotive engineers, 76% identified "poor performance" by auto company top management as a main reason for lagging productivity in the U.S. automotive industry.[41]

At some point, the short-term focus upon internal operations, sales and shareholder satisfaction, arrives at the expense of long term consumer satisfaction. If an industry does not change in response to varying consumer needs, it will lose its consumer franchise. Thus, the current problems and massive rebuilding by the North American automobile manufacturers could be interpreted as making up for expenditures that should have been done over the past two or three decades.

4.3.6 Quality of Work Life and Product Quality

As was evidenced in Chapter 3, North American consumers are dissatisfied with the quality of workmanship in the domestic automobile. It is possible to attribute at least some of this lack of product quality to worker discontent.[42]

According to Flink, the problem in the work force is due to the fact that the workers have changed while automobile manufacturing methods have continued as they were in the 1920's. For example, the public school system and mass media have led the present generation of assembly line workers to adopt middle class values and expectations.[43] As a consequence, they can no longer tolerate the monotonous boredom of repetitive labour, and absenteeism in North American automobile plants climbed to 13% in the mid-1970s, versus only 3% a few years earlier.[44] In addition, alcoholism, drug abuse and industrial sabotage are frequently observed on the assembly line. The only possible result of these factors is a decline in productivity and quality control.

Today's North American value system also does not place great weight on skilled trades and occupations.[45] It emphasizes instead professional and while collar occupations. The best people do not consider a mechanic or plant worker a likely career. Others who fall into these occupations lack pride in their accomplishment and henc workmanship.

The North American automobile industry has recognized problems in the work life,and various upgrading programmes have been implemented. For example, General Motors implemented a Quality of Work Life program at the Tarrytown plant which resulted in a reduction of lost-man days due to absenteeism, quelled the unrest and discontent among workers and improved productivity and product quality.[46]

Japanese Work Life. The Japanese workforce evidences several differences from their North American counterparts. For example, a Japanese employee expects to spend a lifetime with one company. As a consequence, his success is tied to his company's success. He tends to be well motivated and loyal.[47]

Internal job mobility is encouraged in the Japanese workforce. Initially, an automobile company trains a new employee on the operation of a particular machine. If after a period of time the employee desires a change, he is retrained.

As the workers get older, they also tend to get lighter tasks. In contrast to the U.S. automobile industry, there are no fifty-five year old employees on the assembly line struggling to keep up with others in their mid-twenties.[48]

Japanese workers are also responsible for checking the quality of their own work. This factor tends to make the job more interesting and satisfying, thus making the employee more involved in the company and the quality of the manufactured product.[49]

This high quality of the Japanese worklife has implications for the quality of the product and subsequent consumer satisfaction with the Japanese product. As demonstrated even in North America, there is a positive correlation between Quality of the Work Life and Quality of the product.[50]

4.3.6 Manufacturing Technology and Product Quality

The average North American automobile plant is between 20 and 30 years of age,[51] with some dating back to the 1930's. While the age of plant has not prevented the North American manufacturers from developing and adopting modern technology, the pressure to do so has not occurred until very recently, when, for the first time, they have not been able to sell every car that could be made.

The relative newness of the Japanese and European automobile industries means that they have the most recent automotive technology, both in terms of component manufacturers and assembly operations. For example, in 1979, no Japanese automobile plant was older than 11 years in age.[52] New equipment incorporating the most recent technological developments including robotics means greater precision in manufacturing and hence the production of higher quality products.

Hayes provided a different explanation for the quality differences.[53] On the basis of his study of six manufacturing facilities (primarily electronics and computer), he concluded that the Japanese managers succeed because they never stop emphasizing the manufacturing basics. They constantly work to improve equipment design, inventory control system, and worker skills through cooperation at all levels. The ultimate goal is error-free operations and perfect products.

The superiority of Japanese manufacturing technology and subsequent effects on motor-vehicle quality are acknowledged by the North American industry. In a 1982 Automotive News survey of General Motors, Ford Motor Co., Chrysler, American Motors and Volkswagen of America engineering personnel, 74% agreed that Japanese vehicle manufacturers surpassed the U.S. in manufacturing expertise.[54] Furthermore, 84% identified Japan as best in "Fit and Finish".

In 1978, the North American automobile industry produced 12.7 vehicles per man year. In contrast, the Japanese automobile industry produced 23.6 vehicles per man year.[55] MacDonald acknowledged that there may be some difficulty in comparing productivity figures between North America and Japan due to the difficulty in securing comparable employment data. However, even when he assumed that the Japanese workforce was understated, there was still a significant difference in Japan's favour.

The benefits to the consumer of the above-mentioned characteristics of the Japanese automobile industry are several. With higher quality manufacturing, greater productivity and comparable or lower wages, the Japanese automobile manufacturer can offer the North American consumer value for the money, the combination of the top-ranking purchase price and quality attributes. For basically the same size vehicle, the Japanese manufacturers have a price advantage over their North American counterparts, which one observer estimated to be $(U.S.)1,700.[56]

4.3.7 Fuel Economy and Mileage Ratings

As was established in Chapter 2, fuel economy is a high-ranking attribute used by North American consumers to evaluate their automobile choice.

On fuel economy, the Japanese cars again surpassed their North American counterparts. For example, MacDonald compared the fuel consumption of mini-compacts and sub-compacts as follows:[57]

Fuel Consumption

(litres/100 km)

Manufacturer	1980	1981
North American	8.7	8.1
Japanese	8.2	7.1

Again, North American automotive personnel agreed with this relative difference. In the 1982 survey of domestic automotive engineers, 76% rated motor-vehicles from Japan as best in fuel economy.[58]

While the differences in fuel economy may cause some degree of dissatisfaction with the domestic car, it appears that the major source of complaints comes from public sector attempts to publicize mileage ratings. In the attempt to derive comparable figures, the government departments and agencies have produced their figures under ideal conditions. The consumer, however, expects to achieve the same mileage, no matter what his driving habits or the climatic conditions. He then finds that his mileage doesn't meet the published figures and consequently is dissatisfied.

One dealer observed that mileage publications are no longer a major problem. For the average consumer used to thinking in miles per gallon, the metric presentation of litres per 100 kilometers is not understandable, and he no longer makes the comparisons.

4.3.8 Warranties

There are several reasons why warranties have strained customer-dealer-manufacturer relations. While several of the reasons are no longer applicable, they at least explain why this has been a problem area in the past.

Compensation for Warranty Parts. At one time, a dealer replacing a defective part under warranty was entitled to charge the manufacturer only the net cost of the part plus 25%. Several auto dealers interviewed by Romero, however, complained that this scheme covered only the cost of handling the parts and the portion of general overhead expenses assigned to the parts department.[59] It did not provide any profit for the dealer. Thus, warranty work would easily be put aside in favour of retail work.

Compensation for Labour Performed Under Warranty. The compensation of dealers for labour performed under warranty is based upon a specified time for making a particular repair and upon an hourly labour rate negotiated with each dealer.[60] While a survey of Ontario motor vehicle dealers indicated that 55% of the dealers were satisfied with the rates of payments, the other 45% stated they were not. Reasons for the dissatisfaction included:[61]

1. The warranty time allowance was unrealistic.
2. The warranty time was fixed irrespective of whether it took the mechanic more or less time to replace the defective part, and
3. The dealers could receive less for warranty work than they did for the same work paid for by the consumer.

Warranty Regulations. Each manufacturer administered their warranties under a strict set of rules aimed at reducing the total cost of warranty repairs. Some dealers regarded these rules as being limiting which predisposed them not to perform warranty repairs.[62] Also, when warranty repairs involved only a small sum of money, the dealer would find his required paper work to be more expensive than what he would receive in compensation.

Labour Only Limitations. For at least two reasons, manufacturers have been reluctant to pay for repairs or adjustments involving only labour.[63] First, manufacturers were only obliged under the warranty to repair or replace a defective part. Second, when there were no defective parts to be removed and kept as evidence of the need for warranty repair, manufacturers could not control whether or not the repairs were actually needed or were performed by the dealers. For these reasons, warranty repairs involving only labour had to be approved by the manufacturer's representative. Without advance agreement, the dealer who went ahead was obliged to absorb the cost of the repairs if the manufacturer's representative refused compensation.[64] Although Romero found that only 20-30% of all warranty claims required prior authority, the administrative requirements for such a large portion of warranty work encouraged dealers to refuse or delay labour-only warranty repairs.[65]

Delay in Dealer Payments. A survey of Ontario motor vehicle dealers found substantial delays in warranty payments made by manufacturer to dealers.[66] The average period of payment was found to be 47.52 days and one dealer was reported to have waited 99 days before compensation was received. Again, such a factor influences a dealer's responsiveness to the conduct of warranty work.

Rejection of Warranty Claims. As implied above, the dealer could deny the customer's request for warranty work if the dealer was in any doubt as to whether or not he would be reimbursed by the manufacturer. For example, one of the respondents in the survey of Ontario motor vehicle dealers stated that in 1970, an average of 20% of his warranty claims in 1970 were rejected.[67] For all dealers, the average proportion of warranty claims rejected by the manufacturers was 4.07%.

Warranty Expiration. Today, a main problem surrounding warranties centers on the expiration date or mileage. No matter how long the warranty period is set, there would always be someone who had problems immediately after expiry and who would want consideration. The optional extended warranties available today seem to have taken some pressure off this area as a source of problems.

Interpretation. McNeil and Miller's explanation for the warranty problem was inconsistency in warranty interpretation.[68] There was uncertainty on the part of the dealer as to what the manufacturer would allow. Inconsistency could also arise when district personnel were understaffed and overburdened with respect to the volume of warranty claims.

Feldman discussed the most common problems that consumers experience with respect to warranties.[69] He found that there existed differing perceptions of warranty functions between the customer and the manufacturer. Other problems related to obscure terminology, lack of access to the warranty prior to purchase, lack of clarity regarding responsibility for provision of the warranty service, and difficulty in obtaining satisfactory warranty service.

Consumer. The consumer shares some responsibility for warranty problem in not reading or understanding their provisions. However, some manufacturers and dealers have avoided this situation by simply stating that everything was covered, unless caused by abuse.

4.3.9 Product Complexity and Servicing

Product complexity of the new car product has to account for at least some of the difficulties of the new car purchaser. The significant engineering advances in ignition and engine controls, automotive electronics, and other areas of the new car have at least two implications. Today's new automobile is no longer the hobby of teach-yourself, back-yard mechanics. Servicing and diagnostic capabilities must be extremely advanced and service personnel must effectively be on continuous training to keep up with the changes. It is a dealer expense easy to put off. Any slippage, however, immediately creates a situation liable to generating dissatisfaction.

The problem here is partly complicated by the fact that dealers must not only train their personnel in order to keep up with the technology. They must also make significant investments in the diagnostic equipment being continuously developed. Not all dealers are doing so and some are not even using the built-in diagnostic equipment in the cars themselves. Thus, a number of consumer complaints will be generated simply due to the difficulties in identifying the cause of the problem.

The servicing situation surrounding the complex product is further complicated by the easy potential for a breakdown in communications. Customers arrive together at the beginning of the day and on their way to work. They try to explain the problem to a service manager who translates it into a work order. A shop foreman or mechanic in turn must translate the work order. Work is done and cryptic comments about it are recorded on the work order. The customers again arrive in a group and a service manager, or even a salesman on the evening shift, must translate back to the customer what was done. Clearly, this situation is very liable to a breakdown in communications and able to become a source of complaints.

The new car owner shares responsibility in dealing with the complexity of his purchase. Today's automobile can no longer be neglected and expected to run on with unswerving reliability.

Maintenance schedules must be adhered to, and problems immediately considered. For example, Tuff-Kote Dinol, Inc. recently inspected several thousand 1977, 1978 and 1979 makes and found a surprising amount of rust, even though all had been previously rustproofed.[70] Company officials concluded that most of the problems lay with the car owners who failed to return their cars to the rustproofers for the periodic inspections required to keep their warranties effective.

According to James O. Boord, Assistant Director, Automotive Technical Services Department, Champion Spark Plug Co., the manufacturer's share some responsibility for a lack of consumer maintenance.[71] His argument was that the recommended service and maintenance intervals were unrealistically long and created "a complacent attitude among American motorists that will ultimately result in costly and needless repair bills and poor fuel economy."

4.3.10 The Automobile Industry and Complaint Statistics

To the average consumer, an automobile is an automobile, and a purchaser would be unlikely to recognize the complex infrastructure behind their new car. However, any of the following elements of the industry could be a source of complaints:

- The automobile manufacturer,
- The automobile importer,

- Parts manufacturers,
- Parts distributors,
- New vehicle dealers,
- Used vehicle dealers,
- Franchised service outlets,
- Non-franchised service outlets,
- Specialty repair outlets, and
- Specialty accessory outlets.

The relevance of listing these numerous industry elements is to recognize that a new car complaint could arise from a source not in fact connected with the new car purchase. Dissatisfaction and complaint statistics must be carefully analyzed in order to identify their source.

4.4 Conclusions

In Chapter 3, it was concluded that new car purchasers were significantly more dissatisfied with the product of the North American manufacturers than they were with foreign manufacturers. The following factors have each contributed to some degree to this dissatisfaction:

- Encouraged until recently by consumer demand for the larger, more profitable vehicles, domestic producers did not have any impetus for developing quality compact and sub-compact vehicles (Section 4.3.1).
- Supported by a North American emphasis upon newness and

change, domestic manufacturers have had to pay relatively greater attention to annual styling changes, which at some point, have been at the expense of engineering advances, such as in fuel economy (Sections 4.3.2 and 4.3.7).

- The accounting systems of the automobile manufacturers have emphasized usage of tangible short-term production and sales performance measures, because of an inability to account for intangible, long-term service and satisfaction (Section 4.3.3).
- The large size and bureaucratic nature of the automobile manufacturer organizations allowed them to take a sales orientation, and focus upon financial goals and shareholder satisfaction, as opposed to a marketing orientation, with its focus upon consumer needs and purchaser satisfaction (Section 4.3.4).
- The diffusion and adoption of middle class values by North Americans resulted in a relative lack of emphasis being attached to the importance of skilled trades and occupations, the quality of work life in the plants, and pride of workmanship (Section 4.3.7).
- Domestic manufacturers fell behind in manufacturing technology in addition to being reluctant to accept manufacturing goals of error-free operations and perfect products (Section 4.3.6).

Other factors which partially explain consumer dissatisfaction, but which are common to both domestic and offshore manufacturers, are as follows:

- The complexity of today's new car product is not consistently matched by dealer diagnostic capabilities, training of service personnel, or new car owner adherence to maintenance schedules (Section 4.3.7).
- The complexity of the automobile industry makes it liable to breakdowns in communications between manufacturers, dealers and consumers (Sections 4.3.7 and 4.3.8).
- Features of manufacturer-dealer relationship on warranty work resulted in warranty work being given second preference by dealers to the more profitable and easily managed retail work (Section 4.3.8).
- As long as warranties have clauses, they will be a potential source of disagreement between manufacturers, dealers and purchasers (Section 4.3.8).
- Publications by various public bodies of gas mileage ratings derived under ideal conditions have resulted in unrealistic new car purchaser expectations (Section 4.3.7).
- The new car purchase has had attributed to it dissatisfaction and complaints more rightfully belonging to other elements of the automobile industry (Section 4.3.10).

Footnotes

[1] Ken Romain, "May Foreign Car Sales Up 60% Over Year Ago," The Globe and Mail, 11 June 1981, p. B2.

[2] Thomas Hedley, Energy Conservation: Automotive Vehicle and Industry (Ottawa, Ontario: Energy Research Group, Carleton University, Report ERG 75-5, November, 1975), Appendix A; N.B. MacDonald, The Canadian Automobile Industry - Some Emerging Perceptions/Prescriptions (Corporation House Ltd., Working Paper No. 1, March, 1980); Simon Reisman, The Canadian Automotive Industry - Performance and Proposals For Progress, (Cat. No. C2-60/1978, Minister of Supply and Services Canada, October, 1978), pp. 1-25; Government of Canada, Industry, Trade and Commerce, The Automotive Industry in Canada (Sector Profile 2 Discussion Paper, 1978); N.B. MacDonald, The Future of the Canadian Automotive Industry in the Context of the North American Industry (Corporation House Ltd., Working Paper No. 2, November, 1980); Automotive Task Force, Review of the North American Automotive Industry (April, 1977).

[3] Reisman, The Canadian Automotive Industry, pp. 1-25, 127-131.

[4] Government of Canada, The Automotive Industry, p. 7.

[5] Ibid., p. 2.

[6] MacDonald, The Future of the Canadian Automotive Industry, p. 162.

[7] Reisman, The Canadian Automotive Industry, p. 210.

[8] Automotive Task Force, Review, p. 128.

[9] Ibid., p. 50.

[10] Alfred P. Sloan, Jr., My Years With General Motors (New York: Macfadden-Bartell Corporation, 1965), p. 190.

[11] Government of Canada, The Automotive Industry, p. 2.

[12] Reisman, The Canadian Automotive Industry, pp. 214-216.

[13] MacDonald, Canadian Automotive Industry, p. 51.

[14] James J. Flink, The Car Culture (Cambridge: The MIT Press, 1975), p. 194; J. Patrick Wright, On a Clear Day You Can See General Motors (New York: Avon Books, 1979), p. 211.

[15] Flink, The Car Culture, p. 194.

[16] Wright, General Motors, p. 211.

[17] Ibid., pp. 211-212.

[18] Lawrence J. White, The Automobile Industry Since 1945 (Cambridge: Harvard University Press, 1971), p. 203.

[19] Wright, General Motors, p. 251.

[20] White, The Automobile Industry, p. 194.

[21] Ibid., p. 211.

[22] Ibid., pp. 211-218.

[23] Al Fleming, "Engineers Blame Top Management for Car Makers' Productivity Lag," Automotive News, February 15, 1982, pp. E-1, E-4, E-6.

[24] Wright, General Motors, p. 70.

[25] Kenneth McNeil and Richard E. Miller, "The Profitability of Consumer Protection: Warranty Policy in the Auto Industry," Administrative Science Quarterly 25 (September, 1980), p. 409.

[26] Wright, General Motors, p. 70.

[27] McNeil and Miller, "The Profitability of Consumer Protection,"p.4

[28] Frederick V. Fox, Larry E. Pate, and Louis R. Pondy, "Designing Organizations to be Responsive to their Clients," in The Management of Organizational Design: Strategies of Implementation, eds. Ralph H. Kilmann, Louis R. Pondy, and Dennis P. Slevin (New York: Elsevier North Holland, 1976), pp. 53-72, cited by McNeil and Miller,"The Profitability of Consumer Protection,"p.409-1

[29] McNeil and Miller,'The Profitability of Consumer Protection,"p.40

[30] Ibid., p. 410.

[31] Ibid.

[32] Ibid., p.409.

[33] Wright, General Motors, pp. 227-228.

[34] Ibid., pp. 228; McNeil and Miller,"The Profitability of Consumer Protection," p.427.

[35] Ralph Gray, "Chevy rehires Staudt, Splits Marketing, Sales," Advertising Age, July 6, 1981.

[36] The two pieces of industry supported research that could be identified were: Peter C. Thirkell, "Consumer Expectations, Disconfirmation and Satisfaction," University of Western Ontario, September, 1980, a doctoral research piece supported by General Motors of Canada, and Canadian National Survey of New Car Buyers, Rogers National Research,Toledo,Ohio. "Consistent" marketing research, however, would be one to three year comprehensive

"usage and attitude" studies, much like those conducted by the Canadian consumer goods companies in each of their product categories. Like the auto companies, these companies are U.S. owned, but nonetheless conduct their own research.

[37] Martin Dewey, "Man-Machine Research Grows," Globe and Mail, August 29, 1981.

[38] Robert E. Cole, "The Japanese Lesson in Quality," Technology Review, (July, 1981).

[39] Donald MacDonald, Detroit 1985 (Garden City, New York: Doubleday & Company, Inc., 1980), p. 22.

[40] Wright, On a Clear Day.

[41] Fleming, "Engineers Blame Top Management."

[42] Flink, Car Culture, p.206.

[43] Ibid.

[44] Ibid.

[45] In Peter C. Pineo and John Porter, "Occupational Prestige in Canada," Canadian Review of Sociology and Anthropology 4(1967), pp. 24-40, it was found the the 43 "Craftsmen, Production Process Workers" occupational titles had a mean score of 36.55 on a 1-100 scale of "social standing". This mean score was lower than that for "Owners and Managers," "Professional Occupations," "Clerical Occupations,""Sales Occupations," "Service and Recreation Occupations," "Transport and Communications," and only ahead of "Farmers and Farm Workers,"

"Loggers and Related Workers," "Fishermen, Trappers and Hunters," "Miners, Quarrymen and Related Workers," and "Labourers, Not-Elsewhere-Specified".

[46] Robert H. Guest, "Quality of Work Life - Learning from Tarrytown," Harvard Business Review (July-August 1979): 76-87.

[47] Jeremy Main, "The Battle For Quality Begins," Fortune, December 29, 1980, p.33. For a comprehensive and analytical treatment of the Japanese company, see Rodney Clark, The Japanese Company (New Haven and London: Yale University Press, 1979).

[48] Nicholas Valery, "Motoring Into the 1980's - A Survey," The Economist, March 10, 1979, p. 15.

[49] Ibid.

[50] Guest, "Quality of Work Life," pp. 76-87.

[51] Valery, "Motoring into the 1980's", p. 23.

[52] Ibid.

[53] Robert H. Hayes, "Why Japanese Factories Work," Harvard Business Review (July-August, 1981): 56-66.

[54] Fleming, "Engineers Blame Top Management", p. E-4.

[55] MacDonald, The Future of the Canadian Automotive Industry, pp. 45, 126.

[56] A U. S.

Department of Transportation - commissioned study by James Harbour concluded that there was a $1,700 average unit cost difference between Japanese and American manufacturers (see Ken MacDonald, "Japan's Advantage: $1,700 a Car," Automotive News, December 21, 1981, p. 17).

[57] Ibid., p. 21.

[58] Fleming, "Engineers Blame Top Management," p. E-4.

[59] Louis J. Romero, "Automobile Warranties in North America with Special Reference to the Ontario Situation" (Masters of Laws Thesis, Graduate Programme in Law, Osgoode Hall Law School, York University, September, 1972), p. 53.

[60] Ibid.

[61] Ibid., pp. 54-57.

[62] Ibid., pp. 57-58.

[63] Ibid., p.58.

[64] Ibid.

[65] Ibid.

[66] Ibid., p. 59.

[67] Ibid.

[68] McNeil and Miller, "The Profitability of Consumer Protection."

[69] Laurence T. Feldman, "New Legislation and the Prospects for Real Warranty Reform," Journal of Marketing 40 (July, 1976): 41-47.

[70] "Tuff-Kote Study Blames Owners for Rust in Cars," Automotive News, November 30, 1981, p. 52.

[71] "New-Car Service Intervals Called Unrealistic, Costly," Automotive News, November 23, 1981, pp. 10, 18.

Chapter 5

RESPONSES TO CONSUMER DISSATISFACTION

Chapter 5

RESPONSES TO CONSUMER DISSATISFACTION

5.1 Introduction

Previous Chapters of this report identified several reasons for the relatively high levels of new car purchase dissatisfaction as summarized in Section 3.6.1. One reason was that the automobile industry generated a relatively high level of dissatisfaction, not because of any greater failing by this industry compared to other industries, but simply because of the nature of the product and associated purchasing behaviour (Section 2.4). Consumers are highly involved in the new car purchase and cannot ignore even the minor problems of a complex product as they might do with other simpler products (Section 2.4).

A second reason for dissatisfaction was that the new car purchaser is distinguishable from the general population and shares demographic and socio-economic similarities with the "complainer" i.e. the person who contacts private and public sector organizations when dissatisfied (Sections 2.2, 3.6.3 and 3.7.2). This relationship again results in the new car purchase generating a relatively higher level of dissatisfaction and complaints as compared to other products.

A third reason for new car dissatisfaction was that some of the complaints more rightfully belonged to other elements of a complex automobile industry, and not to the automobile manufacturers or authorized dealers (Section 4.3.10).

These conclusions do not mean that new car purchase dissatisfaction is unjustified. It was established that today's new car purchaser selects their vehicle by comparing the alternatives on price, fuel economy, quality, reliability, and servicing requirements (Section 2.3). It was further established that new cars, especially those of the North American manufacturers (Sections 3.3, 3.5, and 3.6.2), had failed on some of the most important of these attributes, especially quality of materials and workmanship (Sections 3.3, 3.4.1 and 3.5.1), warranty performance (Sections 3.4.2, 3.5.2 and 3.6.1), and dealer service and "comeback" (Sections 3.5.2 and 3.5.4).

The reasons for these failings were numerous. Quality of materials and workmanship, at least among the North American manufacturers, was traced to:

- A styling versus an engineering emphasis (Section 4.3.2),
- A lack of societal emphasis upon skilled trades and occupations (Section 4.3.7),
- A lack of emphasis upon the quality of worklife in the plants (Section 4.3.7)
- An inability to quickly adopt advances in manufacturing technology (Section 4.3.6), and
- A reluctance to accept manufacturing goals of error-free operations and perfect products (Section 4.3.6).

Warranty problems were traced to:

- Features of the manufacturer-dealer relationship which encouraged dealers to prefer the more profitable and easily managed retail work (Section 4.3.8) and
- Disagreement over the interpretation of warranty clauses (Section 4.3.8).

Performance of warranty work and other facets of dealer servicing resulting in consumer dissatisfaction were traced to:

- The complexity of the new car product (Section 4.3.7),
- Insufficient dealer diagnostic capabilities (Section 4.3.7),
- Lack of new car owner adherence to maintenance schedules (Section 4.3.7),
- Lack of training of service personnel in both current automotive technology and human relations skills (Section 4.3.7),
- An emphasis upon sales as opposed to service (Section 4.3.4), and
- An inability to account for the intangible aspects of customer satisfaction (Section 4.3.3).

The reasons that North American manufacturers took so long to respond to consumer dissatisfaction were:

- The large size and bureaucratic nature of the automobile manufacturer organizations made upward communications difficult and responses slow (Section 4.3.4),
- A sales, financial and production orientation with a goal of shareholder satisfaction predominated over a marketing

orientation with a goal of consumer and purchaser satisfaction (Sections 4.3.3 and 4.3.4), and

- The complexity of the automobile industry made it liable to breakdowns in manufacturer, dealer and customer communications (Sections 4.3.7 and 4.3.8).

The public sector as well contributed to consumer dissatisfaction. The publication of gas mileage ratings derived under ideal conditions resulted in unrealistic new car purchaser expectations (Section 4.3.7).

The preceding explanation for consumer dissatisfaction with the new car purchase seems to indicate that responses must come mostly from the dealers and manufacturers. As a consequence, this Chapter provides several prescriptive suggestions.

The role of the public sector would seem to be one of facilitation, monitoring, and advocacy. This sector would provide the climate and encouragement for dealers and manufacturers to take the necessary steps. It would monitor the results through research and act only when the private sector failed to respond. Details of this role conclude this Chapter.

5.2 Dealer Prescriptions

There are four underlying principles to the dealer-related prescriptions which follow. The first principle is that the dealer must adopt a marketing as opposed to sales orientation. The marketing orientation means that the dealer is truly consumer-oriented and tries to understand his prospective customer and respond accordingly. This orientation not only applies to selling the consumer the right vehicle but to providing him correct and timely servicing.

The second principle for the dealer is to adopt a long-term perspective. The dealer must realize that his ultimate success will come from selling the customer on the dealership and his product line as opposed to a particular vehicle. Doing everything to satisfy the customer will maintain loyalty and ensure repeat business.

The third principle is to ensure open communications. In large dealerships in particular, the servicing area is liable to a breakdown in the link between the customer, the service technician, and back to the customer. For example, a three-year evaluation study done by Booz-Allen and Hamilton found that the shorter the link between the customer and the mechanic, the higher the quality of repair (measured by return rate for adjustment).[1] Customers were happier when dealing with either the owner or the mechanic than with the service manager or a writer.

The fourth principle is to appreciate the problems inherent in the servicing area. "Comeback" is such a serious problem in the customer's eyes that the dealer must take every effort to ensure problems are properly diagnosed, that the customer understands what will occur during the repair period, and that the customer be immediately informed of any changes in the repair status.

5.2.1 Salesforce Prescriptions

. Qualify the respondent and sell him on the car that he needs and not the car that you would like to sell. Listen to what the prospect is saying. Have the prospect drive the car. Care about the customer. Think long-term and make the customer want to come back again when he buys his next new car, 3 to 5 years from now.

. Conduct the predelivery inspection through the eyes of the customer. It is "fit and finish" that indicates to the customer the quality of his vehicle.

. Explain the warranty procedure and owner's manual. It must be assumed that the customer won't read it.

. Followup the customer on a periodic basis, such as every other month, to ensure continued satisfaction. Maintain customer contact even after the warranty expires.

5.2.2 Servicing Prescriptions

. Recognize that the service center is the key to long-term customer satisfaction. If the manufacturer has produced a quality product and the salesforce have done their job, the experiences of the customer at the service center will determine whether or not he returns to the dealer.

. Staff and train the service people according to the job they will do. Keep qualified the service technicians and shop foremen on today's complex product. Service people who deal with the customers must be either technical people with interpersonal training or human relations people with technical training.

. Pay the service people at least as much as the sales people. Set up the service center as a profit center and engage in profit sharing. Alternatively, tie service bonuses to the customer satisfaction index.

. Recognize the inherent conflict in the morning and evening when customers arrive to either leave or pick up their vehicle. Provide extra, qualified staff as necessary to greet the customer, accurately record the problem, and explain the repairs when the job is completed.

. Facilitate the service transaction with available computer technology. For example, Reynold & Reynolds Co. created a Service Merchandising System which, with only a vehicle identification number, will immediately provide information on the vehicle, the customer, previous work, and recommended work.[2] It will also produce customized "forecast and followup" post cards.

. Improve customer-technician communications by tape recording the customer's problem description. Alternatively, adopt something like the General Motors Service Research-developed TOUCH (Touch Operated Universal Communication Helper). TOUCH is a self-instructing computerized aid for helping a customer to accurately and fully describe his problem through a series of questions and answers which trigger further questions.[3] The printout for the customer and technician lists a complete and accurate description of the problem as well as a list of possible causes.

. The computer revolution and plummeting prices makes service technology available to even the smallest dealers. However, for the dealer who feels he is still too small to justify the investment, he can recognize his advantage in the personal touch and greater immunity to breakdown of the customer-technician-customer communication link. He or his service technician can deal directly with the customer.

. Ensure the capabilities and usage of diagnostic equipment. Booz-Allen and Hamilton evaluated more than 6,000 pieces of equipment owned by 307 U.S. repair and diagnostic facilities.[4] Only 90% were in full working condition and only 56% of the working units were within industry-accepted accuracy specifications.

. Follow-up the service customer to ensure his satisfaction.

5.3 Manufacturer Responses

Given the reasons for consumer dissatisfaction identified throughout this report and summarized at the beginning of this Chapter, it is clear that the manufacturer has the major responsibility for responding to consumer problems. The prescriptions which follow recognize this responsibility and are based upon the following principles:

. The manufacturer must adopt a marketing orientation with a focus upon consumer needs and satisfaction as opposed to a sales and production orientation. Such an orientation is characterized by extensive marketing research activities and consumer consultation.

. The manufacturer must improve internal as well as external communications. Dealers, in particular, are closest to consumers and have much to offer in understanding consumer problems.

. The manufacturer must recognize and account for the intangible but important nature of long-term consumer satisfaction.

. The manufacturer must recognize and account for the major problem areas related to quality of the product and workmanship, servicing, and warranty performance.

5.3.1 Servicing Prescriptions

. Make servicing a number one priority in the organization. Appoint a vice-president in charge of service who reports to the president.

. Provide continuous service personnel training opportunities to the dealers in both human relations skills as well as product technology. Build the professional status of service personnel with degree programs, apprenticeship training programs, courses integrated with local colleges, and short-term refresher and update courses in local areas and at the dealerships.

- Provide courses and seminars to the dealers on servicing so that they fully appreciate and understand the servicing function.
- Monitor dealer servicing through surveys of customers. Construct customer satisfaction indices covering all aspects of dealer service, such as new vehicle condition at delivery, and vehicle condition at subsequent periodic intervals.
- Set ever-increasing satisfaction objectives for dealers. Reward those who meet their objectives accordingly.
- Provide dealer-consultants to give nuts-and-bolts advice on problems unique to individual service departments to dealers who request these services as well as to dealers who do not meet satisfaction objectives.
- Implement an upwards communications system from dealers to benefit from their experience and close relationships with customers. Consult extensively with those dealers at the high end of the satisfaction indices.
- Recognize the dealer as an equal partner in generating customer satisfaction. Implement franchise agreements that are shorter and understandable.

5.3.2 Quality Control Prescriptions

. Make quality a number one priority in the organization. Appoint a vice president in charge of Quality Control who reports directly to the president.

. Make error-free operations and perfect cars the objective of the manufacturing process. Implement "zero-defect" programs as has characterized aerospace and submarine programs.

. Improve quality by adopting current manufacturing technology and techniques. Use robotics to enhance quality of workmanship. Build quality into the manufacturing to replace inspections for quality.

. Demand error-free operations and perfection from suppliers.

5.3.3 Quality of Worklife Prescriptions

Implement quality of worklife programs which are characterized by:[5]

. Seeking and heeding worker suggestions,

. Involvement of the workforce in decisions that affect them,

. Adoption of concensus decision-making,

. Provision of more varied tasks to the workforce,

. Instilling a sense of purpose and mission,

. Using automation to move the workforce from physically demanding jobs to work that is more pleasant, challenging, and skilled,

- Instilling cooperation and consultation,
- Provision of an environment of lifetime employment and firm job security,
- Reduction of the formalized distance between different ranks by shared cafeterias, parking lots, and lockerrooms,
- Removal of adversarial conditions, suspicion and lack of trust,
- Removal of time-clocks,
- Making the workforce responsible for checking their own work,
- Provision of profit-sharing opportunities for the workforce,
- Keeping the workforce fully-informed on all aspects of the business including operations and financial health,
- Recognition of the limitations of quality of worklife programs and variations such as "quality circles" if done in isolation and without full support from both management and the workforce.

5.3.4 Consumer Affairs Units

Implement and encourage consumer affairs units in order to:[6]

- Handle, resolve and analyze customer complaints and inquiries ,
- Develop and disseminate to consumers better information on the purchase and use of the new car and related services and

especially the warranty,

- Serve as an internal consumer "ombudsman" and consultant on consumer matters within the company, and
- Provide liaison with consumer interest organizations such as the Consumer's Association of Canada and the Automobile Protection Association.

5.3.5 Marketing Research Prescriptions

- Conduct periodic marketing research surveys among all new car purchasers. Identify attributes that consumers use to compare and select their new vehicle. Compare manufacturers and models on relative performance on these attributes. Recognize that consumer satisfaction surveys of purchasers of own make and models ignore purchasers who selected other alternatives. Identify why these consumers selected those other alternatives.
- Incorporate the periodic survey results into balance sheet accounts of consumer satisfaction.

5.3.6 Internal Communications Prescriptions

- Recognize the inherent difficulties of internal communications within large organizations. Implement procedures to encourage and facilitate upwards communications.

5.3.7 Warranty Prescriptions

- Provide blanket, all-inclusive warranties. As long as warranties have clauses, they will be open to interpretation and disagreement.
- Plan warranty procedures which assume that the customer does not read the warranty.
- Express warranties in simple and clear language.
- Recognize the potential for consumer dissatisfaction for problems that occur shortly after the warranty expires. Remind purchasers just before their warranty expires to bring their vehicle in for a check. Afterwards, negotiate with the consumer such that the consumer will return for the next purchase.
- Compensate dealers for warranty parts and labour at the retail rate.
- Simplify dealer warranty procedures, including payment and warranty claim approvals.[7]

5.4 Public Sector Responses

This report emphasizes the responsibility of dealers and manufacturers to respond to new car purchase dissatisfaction. Many prescriptions have been advanced, most of which have been recognized by at least some elements of the automobile industry, and many of which have already been implemented.

As Day emphasized, however, self-regulation is not always effective.[8] Members of an industry often cannot or will not see injustices in their systems and simply ignore criticisms. Some issues are perceived as outside of the responsibility of the industry. Some elements of the industry simply do not have the resources to respond to consumer problems even if desired. Finally, there is a lack of public trust in self-regulation movements. In the automobile industry, in particular, various incidents such as the GM response to Nader's book, the Pinto gas tank fires, the GM engine switching, the "Rusty Fords", and product recalls create an atmosphere of distrust and suspicion. These problems of self-regulation, therefore, provide a first rationale for public sector intervention in dealing with new car purchase dissatisfaction.

A second rationale for government response is that individual automobile manufacturers and dealers show differences in their ability to provide consumer satisfaction. In Sections 3.3, 3.5, and 3.6.2, for example, it was shown that import manufacturers differed from domestic manufacturers in providing higher levels of consumer satisfaction. These sections also identified differences among individual manufacturers although no consistent patterns could be observed.

In principle, the market mechanism should work to isolate and remove unsatisfactory market elements. However, the market mechanism assumes that consumers have relevant information which, for the complex new car product, is not easy. Thus, the public sector has a role to play in monitoring manufacturer and dealer performance and ensuring consumers are fully informed of any variations.

The principles underlying public sector response to consumer dissatisfaction with the new car purchase would therefore seem to be be threefold:

- Facilitating industry attempts to increase consumer satisfaction,
- Monitoring industry results in increasing consumer satisfaction, and
- Assuming an advocacy role when industry attempts and results are not satisfactory.

These principles underly the public sector prescriptions which follow.

5.4.1 Government-Industry Cooperation and Consultation

Ensure the dialogue between the automobile industry and government.[9] The automobile industry is diverse and complex. This makes unilateral action by the public sector without consultation and understanding, hazardous at best. Joint analysis of consumer problems and development and testing of the appropriate solutions is more appropriate. Consult with the Motor Vehicle Manufacturer's Association and the Federation of Automobile Dealer Associations of Canada.

5.4.2. Workforce and Quality of Worklife Prescriptions

. Support and encourage the development of increased pride and professionalism in skilled trades and service occupations.

. Support research activities devoted to study of quality of worklife programs in Canada.

. Support the current Department of Labour program which provides direct financial assistance to organizations that wish to implement Quality of Worklife projects.

5.4.3 Manufacturing Assistance Prescriptions

Assist and encourage manufacturers and dealers in their adoption of current manufacturing technology through:

. Accelerated depreciation allowances for capital expenditures,

. Lower tax rates,

. Tax credits for the investment of new capital,

. Increased incentives for research and development, and

. Loans and credit for purchase of robotics and new equipment.

5.4.4 Marketing Research Prescriptions

. Conduct periodic research on the new car purchase process. Using new car registrations as a base, randomly select a sample of new car purchasers disproportionately stratifed by manufacturer. Conduct a survey among these new car purchasers. Compare manufacturers on the proportion of satisfied consumers at all steps of the purchase process. For manufacturers showing unacceptable satisfaction proportions, draw additional samples further stratifed by car model to pinpoint problem areas. Consult with manufacturers showing disproportionate consumer dissatisfaction.

. Recognize the limitation of consumer-initiated complaints data. These complaints are limited in that the demographic and socio-economic profile of complainers is different from the general population of all dissatisfied consumers, and that only a small proportion of dissatisfied consumers complain to government bodies. Furthermore, if all car makes are equally satisfactory to consumers, the complaints will be in proportion to their share of markets and show most complaints for the most popular vehicles. Nonetheless, with their limitations realized, these complaints analyzed in detail may provide useful information to the automobile industry and the public sector.

. Analyze car registrations to identify the small proportion of dealers who account for the majority of new car sales. Randomly sample purchasers, stratified by dealer, of the large dealers. Conduct satisfaction surveys among these respondents and compare dealers on all elements of the purchase process. Consult with dealers showing unacceptable satisfaction ratings.

5.4.5 Advocacy Prescriptions

. Publish the research results of Section 5.4.4 above after all attempts at cooperation and consulation have failed. Publish the satisfaction ratings for the dealers or manufacturers who have failed and compare them only to the average of all other dealers or manufacturers as appropriate.

5.4.6 Other Programs and Prescriptions

Numerous other well-known programs for responding to new car purchase dissatisfaction have been proposed or implemented. These include:

- Mediation and Arbitration,[10]
- Information Disclosure,[11]
- Consumer Education,[12]
- Litigation,[13] and
- Legislation.[14]

On the basis of the preceding analyses, these programs do not appear as relevant to the new car problem, as the several other prescriptions listed previously. Consumer dissatisfaction is primarily tied to poor product quality and workmanship, servicing, and warranty performance. As a consequence, the presriptions which were derived deal specifically with each of these areas. It would therefore seem appropriate to assess the success of these prescriptions, many of which have already been recently implemented, before further consideration is made of the above-mentioned programs. These programs are essentially responses to situations where an industry is either not changing or succeeding in reducing dissatisfaction. It is apparent that the automobile industry is changing and has taken major steps, even within the preceding two-year period during which this report was prepared, to improve purchaser satisfaction. The success of these efforts will be apparent by the end of the next two-year period.

Footnotes

[1] Helen Kahn, "Automobile Repair Industry Satisfies," Automotive News, February 23, 1981, pp. 10,12.

[2] "Shop Profit, Efficiency Improved," Automotive News, January 18, 1982, p. 36.

[3] Francis J. Gawronski, "Maryland Firm to Market New GM Service System", Automotive News, October 26, 1981, p. 18.

[4] Kahn, "Automobile Repair Industry Satisfies."

[5] Many of the quality of worklife prescriptions are arising out of the Japanese practice. For some references, see William Ouchi, Theory Z, How American Business Can Meet the Japanese Challenge; Robert E. Cole, "The Japanese Lesson in Quality," Technology Review (July, 1981); Mark Lukasiewicz, "Hard Work, Labor Peace Help Produce the 'miracle'", The Globe and Mail, December 14, 1981, p. B21. For some North American experience on quality of work life programs, see Richard A. Wright, "High-Tech Factory Builds a High-Technology Engine," Automotive News, October 5, 1981, p. 17 (for the Livonia, Michigan Cadillac engine plant experience) and Ken MacDonald, "Japan's Advantage: $1,700 a car," Automotive News, December 21, 1981, p. 17 (for reference to the Harry Katz study of 18 GM assembly plants between 1970 and 1979). For some reservations about Quality of Work Life programs and especially quality circles, see Cole, "The Japanese Lesson,"; A.S.Plotkin, "Economists Offer Advice to American Auto Makers,"

Automotive News, February 15, 1982, pp. E-24, E-25; and Marjore Sorge, "Work Smarter Not Harder, Advises Quality Consultant," Automotive News, July 27, 1981, p. 6.

[6] For further information on industry consumer affairs units, see Patrick E. McGuire, The Consumer Affairs Department: Organization and Function (New York: The Conference Board, Inc., 1973); and E. Laird Landon, Jr. , "Responding to Consumer Complaints: Organizational Considerations," in New Dimensions of Consumer Satisfaction and Complaining Behaviour, eds. Ralph L. Day and Keith H. Hunt (Bloomington, Indiana: Division of Research, School of Business, Indiana University, 1979), pp.91-94.

[7] For additional warranty prescriptions, see George Fisk, "Guidelines for Warranty Service After Sale," Journal of Marketing 34 (January, 1970): 63-67, E. Patrick McGuire, ed. Consumer Product Warranties (New York: The Conference Board, Inc., 1975); and, John R. Kennedy, Michael R. Pearce and John A. Quelch, "Consumer Products Warranties: Perspectives, Issues, and Options," (London: School of Business Administration, The University of Western Ontario, no date).

[8] George S. Day, "Mechanisms For Industry Self-Regulation," in Public Policy in Marketing Practices, ed. Fred C. Allvine (Chicago, Illinois: American Marketing Association, 1973), pp. 185-195.

[9] For additional comment on industry-government cooperation,

see R. A. Bauer and S.A. Greyser, "The Dialogue That Never Happens," Harvard Business Review (January-February, 1969): 122-128 and Jagdish N. Sheth and Nicholas J. Mammana, "Recent Failures in Consumer Protection," California Management Review 16 (Spring, 1974): 64-72.

[10] For recent analyses of consumer arbitration, see Stephen A. Goodwin, Vijay Mahajan, and Bhal J. Bhatt, "On Consumer Dissatisfaction: Consumer Arbitration as an Alternative Dispute Resolution Mechanism", in Advances in Consumer Research, Volume VI, ed. William L. Wilkie (Ann Arbour: Association for Consumer Research, 1979), pp. 460-465; and William L. Shanklin, "Consumer Arbitration: An Analysis," in 1975 Combined Proceedings, Series No. 37 (Chicago: American Marketing Association, 1976), pp. 601-604. For a recent review of the industry supported AUTOCAP program, see "AUTOCAP Struggles for Maturity," Automotive News, February 22, 1982, p. 72. For a description of the Better Business Bureau supported program, see Twenty Questions (and Answers) About Consumer Arbitration, The Better Business Bureau of Canada, 2 Bloor Street E., Suite 3034, Toronto, Ontario, M4W 3J5.

[11] For recent analyses of information disclosure requirements, see George S. Day, "Assessing the Effects of Information Disclosure Requirements," Journal of Marketing 40 (April, 1976): 42-52; and Richard L. Smith, II "The 1958 Automobile Information Disclosure Act: A Study of the Impact of Regulation," Journal of

Industrial Economics 28 (June 1980): 387-403.

[12] An extensive literature exists on consumer education and information programs. For recent key references, see Howard Beales, Michael B. Mazis, Steven C. Salop, and Richard Staelin, "Consumer Search and Public Policy," Journal of Consumer Research 8 (June, 1981):11-22; Paul N. Bloom and Gary T. Ford,"Evaluation of Consumer Education Programs," Journal of Consumer Research 6 (December 1979):270-279; Noel Capon and Richard J. Lutz "A Model and Methodology for the Development of Consumer Information Programs," Journal of Marketing 43 (January, 1979):58-67; William H. Cunningham and Isabella C.M. Cunningham, "Consumer Protection: More Information or More Regulation?" Journal of Marketing 40 (April, 1976):63-68; and, Hans B. Thorelli and Jack L. Engledow, "Information Seekers and Information Systems: A Policy Perspective," Journal of Marketing 44 (Spring, 1980):9-24. For a car buyer related study, see Geoffrey C. Kiel and Roger A. Layton "Dimensions of Consumer Information Seeking Behaviour," Journal of Marketing Research 18 (May, 1981):233-239.

[13] For an economists point of view on legal institutions and processes, see Alan A. Shapiro, "An Economic Analysis of Consumer Redress Mechanisms," (Ottawa: Consumer Research and Evaluation Branch, Consumer Bureau, Consumer and Corporate Affairs Canada, March 1980). Phil Edmunston's prescriptions (Lemon-Aid, Don Mills: Musson Book Company, 1980), pp. xxiv-xxv) are that Small Claims Courts have a maximum jurisdiction of $1,000, lawyers be

prohibited and no appeals be allowed, corporate executives be personally responsible for fines or imprisonment where gross negligence or conspiracy has been proven, greater use of treble and punative class action damage claims be made, and that corporate tax right-offs for litigation expenses where corporate liability is established be prohibited.

[14]For a summary of consumer-related Canadian statutes and legislation, see Michael J. Trebilcock, Help! Marketplace Handbook of Consumer Rights in Canada (Canadian Broadcasting Corporation, 1978). For a review of the policy formulation and legislative process in Canada, see J.D. Forbes, "Influence Groups in Canadian Consumer Policy Formulation," The Canadian Marketer (Fall, 1979):27-32; and, J.D. Forbes, "The Law and Canadian Consumers," in Macromarketing: A Canadian Perspective, eds. Donald N. Thompson, Patricia Simmie, Louise Heslop, and Stanley J. Shapiro (Chicago: American Marketing Association, 1980), pp. 225-250. For critical assessments of consumer legislation, see Daniel Bell, "Too Late Reacting, and Too Much Regulation," in The Business-Government Relationship: A Reassessment, ed. Neil H. Jacoby (Goodyear Publishing Co., 1975); Paul Busch, "A Review and Critical Evaluation of the Consumer Product Safety Commission: Marketing Management Implications," Journal of Marketing 40 (October, 1976): 41-49; Alok K. Chakrabarti and William E. Souder, "Government Policies: Barriers or Stimuli to New Product and Innovation?" in

Contemporary Marketing Thought: 1977 Educators' Proceedings, eds. Barnett A. Greenberg and Danny N. Bellenger, Chicago: American Marketing Association, 1977), pp. 196-198; and Dennis H. Tootelian "Attitudinal and Cognitive Readiness: Key Dimensions for Consumer Legislation," *Journal of Marketing* 36 (July, 1975):61-64.